Political Anatomy of Internet Users in Korea

Does the Internet influence social capital and political participation?

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Abstract

The thesis inquires about the factors affecting the behaviours and attitudes of Internet users, some of which may be contributory to the creation of social capital and the better performance of political process from the perspective of participatory democracy. Based on the use and gratification theory and other relevant theories, the model focuses on the causal relationships among the three groups of variables: internal motives for Internet use influence general patterns of individuals' Internet usage, which are constructed as *the sources of social capital*; and the motives and the general patterns have impact on their political use of the Internet which I conceptualize as *engagement in online political opportunities*. The structural equation model is employed for confirming latent factors and conducting path analysis, providing the evidences of the causal relationships among the three factors: motives for Internet use, the sources of social capital and the properties of engagement in political opportunities. The details of the findings include: firstly, confirmatory factors analysis produced three needs of motives for Internet use (social, informational and emotional needs), two types of interpersonal ties (strong and weak ties), and two factors of engagement in online political opportunities (activeness and positiveness); secondly, social and informational needs have positive influence on the source of social capital, for example, by widening and deepening interpersonal relationships, in contrast of negative impact of emotional needs; thirdly, frequent visit to those websites serving entertainment information demonstrated negative impact on engagement in online political opportunities; fourthly, path analysis shows that while social needs and strong interpersonal ties have positive relationship on active use of online political opportunities, informational needs and weak ties have influence on positive evaluation of online political opportunities (efficacy); lastly, logistic regression analysis suggests individuals' social and political capital in the offline context and their patterns of traditional media consumption may affect their engagement in online political opportunities. Ultimately, the thesis is aimed at understanding Internet users as actors in the political process from the view of social capital theory. In the plebiscitary, communitarian and pluralistic approach, individual use of the Internet makes political process more effective and democratic. The Internet makes actors in the process become more knowledgeable on public issues, rich in dense and loose interpersonal networks, and trusting in virtual community. In conclusion, using the Internet contributes the creation of social capital, establishing sustainable social environment for good governance.

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1-1-1. The Internet as a new political medium

If democracy entails equal opportunity for eligible citizens to participate in politics, then the Internet greatly enhances that opportunity (Margolis and Resnick 2000), even though such participation may take different forms from what we have known in the past. The history of the Internet incorporates the idea that individual citizens can have free access to political information and utilise communication tools with which they can organise themselves for collective action (Margolis and Resnick 2000). A memo written by J.C.R. Licklider, a visionary social psychologist and computer scientist, who in 1962 became Director of the Command and Control Research Division of the Advanced Research Projects Agency (ARPA) of the U.S. Department of the Defence, notes the possibilities of citizens using a network of home computer consoles to keep themselves “informed about, and interested in, and involved in, the process of government” (Quoted in Margolis and Resnick 2000), from the idea of which he developed the concept of a “Galactic Network” (Leiner, Cerf et al. 2003). The term refers to a globally interconnected set of computers through which everyone could quickly access data and programs from any site.

Although the history of the Internet started with such thinking of Licklider and other visionaries, such as Leonard Kleinrock who developed the theory of packet switching in 1962 or Lawrence Roberts who connected a Massachusetts computer with a California computer in 1965, it may be commercial uses of the Internet in early 1990s that contributed to the rapid growth of Internet population over the last two decades. By the end of June 2010, Internet

population worldwide was about 1.9 billion out of 6.8 billion of world population, constituting an Internet penetration rate of 28.7%.

The Internet has attracted much attention from academics as well as practitioners. A large proportion of the attention seems to have been drawn to the role of the Internet in transforming political processes with its new capacities. The medium encourages people to communicate with each other based on systemically-accumulated information and interactive modes of communication, which were not possible with existing media, such as TV or newspapers.

First of all, it is evident that the Internet is regarded as an effective tool for *political marketing* given many cases in which it provided political campaigners with new forms of campaign strategies in Britain, the United States, and Korea (Gibson and Ward 2000a; Gibson and Ward 2000b; Gibson, Margolis et al. 2003; Hague and Uhm 2003; Miller 2008). Websites for political campaigns help voters scrutinize the platforms of political parties and make more rational decision than otherwise in voting. The Internet is credited with increasing turn-out rates, as suggested in a 2000 research report that about 79% of those visiting political websites more than 5 times during the campaign season participated in voting in the Korean General Election (Kim and Yoon 2000). This figure is considerably higher than the national average of voting rate, 57%, in the election, and higher still compared with voting rate among those have never gone online, which was 50% (Kim and Yoon 2000).

Secondly, people became familiar with online government systems, what we

call electronic government, in Europe, North America, and Asia (Millard, Iversen et al. 2004). The Korean National Assembly passed the Electronic Government Act in March 2001, the objective of which is to “enhance productivity, transparency, and democratic value of administrative organization, and to increase the quality of public service for the citizen’s life, by making provisions on fundamental guidelines and procedures, as well as operational routines in conducting administrative works electronically.”

The efforts to build electronic government have been accompanied by the initiative for public administration reform toward openness, transparency and effectiveness. The March 2003 OECD policy brief on the “e-government imperative” stated:

> E-government can help build trust between government and citizens; Building trust between governments and citizens is fundamental to good governance, information and communication technology (ICT) can help build trust by enabling citizens engagement in the policy process, promoting open and accountable government and helping to prevent corruption” (OECD 2003)[1]

Thirdly, throughout the history of politics, activists have shown skills in making use of new media in educating the public, organizing interests, and mobilizing political support (Pickerill 2000). In the 2000 General Election in Korea, civil movement groups used the Internet for their campaigns against 86 candidates targeted as unfit and corrupt politicians, and succeeded in pushing 70% of them out of the National Assembly (Kang 2003).

The Internet has made a great contribution to the process of recruiting political elites, delivering government services and providing opportunities for effective mobilisation of collective action (Postmes and Brunsting 2002). While the Internet exerts its influence on politics in various ways in different contexts, the diverse aspects of Internet politics converge into a question about the nature of the changes the Internet has made to the overall political process.

Many theorists have engaged in debate over the question: Will the Internet bring about a qualitatively different political system in the future? Some of them supported the idea that ICT promote democratic values through ‘electronic democracy’ (Grossman 1995) and even predicted "the nation-state to evaporate" (Negroponte 1995) under the influence of new technologies. In contrast, some other analysts seem to be suspicious of the revolutionary effect of the Internet (e.g. Margolis and Resnick 2000), arguing that the current forces dominating political news delivery, which dwarf independent efforts, also will overshadow them on the Internet (Davis 1999).

Those who believe in the transformative function of the Internet expect that the Internet could transform politics radically by making the political process more participatory and enabling conversation among equals rather than domination by political elites. In contrast, those who are sceptical about the Internet’s transformative power seem to oppose the idea of the equalisation, online frontiers such as amateurs, hobbyists or other innocent political participants have been crowded out by professionals, a mass audience of entertainment, or simply by information seekers (Norris 2001).

In fact, the Internet has both bright and dark sides: Internet communication facilitates many-to-many communication across state and geographic boundaries, allows individuals to disguise their identities and provides many ways to copy and alter original messages, each of which can decide the role of the medium either in positive or negative ways for the promotion of democratic values (Johnson 2003). The Internet could help or hurt democratic politics.

Abramson, Arterton and Orren (1988: 66) specified the characteristics of new media in their seminal book, *the Electronic Commonwealth: the Impact of Media Technologies on Democratic Politics,* which comprehensively presented the features of computer-mediated communication technologies in relation to democratic political processes. Even though it was published in the 1980s, their arguments and analytical framework are arguably valid for Internet politics today or at least can still serve as a starting point of ideas on Internet research. Their description of new media can be summarised in a set of elements: new forms of media enable the exchange of unlimited volumes of information in two-way or interactive way with a specific target audience, without boundary of space or time zone, leaving the control of the exchange to consumers of the media. Almost all of these properties are reflected in the Internet: (1) the Internet facilitates the exchange of large volumes of data through broadband access, for example, enabling people to enjoy movie streaming over the Net; (2) it connects peoples across different national boundaries and different time zones; (3) contrary to traditional mass media, it makes it possible for its users to choose the content as well as the methods of receiving the content; (4) message senders may benefit from its capacity for narrowcasting; (5) it

contributes to decentralisation of mass communication channels; and, (6) recently, computerised functions are being added to television sets, which enable them to receive Internet services.

Such changes in the ways in which people communicate with each other are likely to influence political processes significantly. As the emergence of printing press technology led to critical changes in the political geography of medieval society, successive communication technologies can be said to have changed modern politics.

> "Indeed the evolution of the electoral system has been closely linked to changes in communication technology, and the history of … elections strikingly parallels the history of media" (Abramson, Arterton et al. 1988: 66).

Some theorists have suggested the possibility of direct democracy (Toffler 1980; Rheingold 1993; Grossman 1995): for example, Grossman (1995) argues,

> "Interactive telecommunications technology makes it possible to revive, in a sophisticated modern form, some of the essential characteristics of the ancient world's first democratic politics."

One of the most radical claims was made by Nicholas Negroponte(1995), who expects "the nation-state to evaporate" under the influence of the information and communication technologies. Morris (2001) believes that the Internet makes a form of direct democracy possible by opening the door to informal, private referenda, involving millions of voters, which will exert a powerful pull on elected officials and decision makers. Such advocates of the transforming

power of new media are sometimes categorized as *mobilization theorists* (Norris, 2000).

On the opposite side, a group of scholars, dubbed *reinforcement theorists* (Norris 2000), argue that the prevalent use of the Internet will strengthen the existing patterns of social inequality or bias. Davis (2000) suggests that, partly because of uneven level of access, the Internet only provides new sources of information for the politically interested and the well-resourced. Murdock and Golding (1989) predict that socioeconomic bias seems unlikely to disappear on the Net even if access to the Internet becomes available among those electronically disadvantaged. Margolis and Resnick (2000) argue for the normalization thesis, in which, as governments and business companies develop sophisticated and attractive websites and lots of people flock to those websites, the power arrangement online between the more and the less resourced resembles that in the off-line world. Contrary to the expectations of Internet enthusiasts, the power arrangement in cyberspace is becoming analogous to that of the real world.

Recently, less visionary but more realistic accounts have been emerging as to how the Internet is actually applied to current political processes (Norris, 1999; Bimber, 1997). Bruce Bimber (1998) proposed a new model of *accelerated pluralism*, in which he asserts that the Internet tends to boost fragmented, less stabilised, issue oriented, pluralistic politics. Such views do not seem to agree with the idea that the Internet may have positive impact on community building in the process of which people are expected to participate more actively in political process and strengthen community culture, but focus instead on the

pluralistic nature of the public as well as on reduced transaction cost in collective actions (Boncheck 1995).

Internet politics[2] may be analogous with the impact of television, which has not transformed citizens' behaviours in politics; arguably, television has increased their knowledge of politics but not necessarily their willingness to take action (Hooghe 2001) . Some analysts point to the problem of increasing political and social fragmentation. In particular, William Galston (2003) worries that the Internet may tighten the already disturbing hold that special interest groups wield in the political process.

Barrack Obama took advantage of YouTube, a video sharing website, in a strategic way for his presidential election campaign. It has been argued that those videos were more effective than television advertisement because viewers chose to watch them or received them from a friend instead of having their television shows interrupted:

> "One of the many ways that the election of Barack Obama as president has echoed that of John F. Kennedy is his use of a new medium that will forever change politics. For Mr. Kennedy, it was television. For Mr. Obama, it is the Internet. "Were it not for the Internet, Barack Obama would not be president. Were it not for the Internet, Barack Obama would not have been the nominee" (Miller 2008).

1-1-2. The Internet and Social Capital

In understanding Internet politics, technological determinism may fall short of

fully explaining these phenomena. What matters is not the technologies themselves, but the social system and culture in which the inherent characteristics of the Internet are embedded. This argument is not to reject the role of technical factors in social adoption of the technologies, but rather to point out *diversity* in the mode of individuals' political use of the Internet.

Generally speaking, the debate over the nature of Internet Impact revolves around the potential outcomes of Internet applications on the political system. In other words, theorists discuss a *visionary picture* of the future which Internet technologies could bring. However, social changes in reality seem to be more closely related to the prevailing social and cultural environment, rather than purely technological possibilities. For example, technological innovations of printing press and transportation led to mass circulation newspapers throughout the United Kingdom but these same advances in technologies did not lead to the same social phenomenon in the United States (Abramson, Arterton et al. 1988). Korean civil movement groups succeeded in defeating some less worthy candidates in the Korea General Election 2000 by using the Internet (Hague and Uhm 2003). However, the case was not valid in Japan (Chae 2006). Such cases demonstrate that the outcome of Internet application may be different according to the specific social environment and political culture.

Consequently, it seems to be appropriate to say that human factors, such as who *use certain media*, *why they use it, or in what way they use it,* are more likely to decide the social effect of the media than purely technological factors do. What matters is how the actors in the political process, like individuals, groups, or governments, use the media. How much does the medium fulfil the

communication purposes of the individuals who use it? In what way does the medium take its part in the structure of political communication between citizens and government? Some analysts suggested that non-technological issues are important in political marketing (Gibson, Margolis, et al. 2003)., electronic government (Ryan 1996), or citizens' collective actions (Pickerill 2000): the properties of the relationship between voter and candidates may affect the outcome of the campaign; citizen empowerment and trust-building are likely to be crucial for success in electronic government; and sustaining collective action involves goals, messages, timing and strategies, which are less related to technological issues.

Political actors, such as individuals, groups, or governments, can be expected to use the Internet so as to attain their goals as much as possible, but under almost the same technological conditions some actors are likely to achieve more than others. In aggregate, however, the ability of individuals to achieve their goals, I would argue, will have significant impact on the overall outcome and efficiency of social and political processes.

I started this research with a question: Does the Internet make political processes work better? The key words in this sentence are *political processes* and *work better*. Firstly, *political processes* include recruitment of political elites, governance of all forms, and various modes of collective action. While in some cases the processes take forms of institutionalised procedure and administrative routines, in other cases they appear as a form of demonstration or social movement. As discussed here, the concept of the political process follows the circular model of David Easton' input-output model (1965): public

demand and supports are reflected in the course of political elections; public policies will be formulated based on participatory governance system; the outcome of policies implemented will be assessed by the public by feedback through multiple channels. Secondly, *work better* implies that adequately qualified candidates are elected, that they are accountable for their actions and decisions. Good governance requires trust among a variety of stakeholders and a willingness to bargain among conflicting interests (Braithwaite, Valerie and Margaret 1998). It also needs sustaining over time, and this requires commitment and a shared feeling of worthiness about collective action. All in all, when norms of reciprocity are upheld, when networks of civic engagement are established, and when trustworthiness exists among members of a society, the political processes may be said to be effective. Without such conditions, conflicts and distrust may prevent actors from achieving their own goals effectively at the individual level and also undermining the outcome of public policies at the societal level.

It has been said that social capital matters in making the political process work better (e.g. Putnam 1993; Fukuyama 1995). The norms of reciprocity and network of civic engagement are key aspects of social capital as Robert Putnam suggested. As many authors on social capital (Coleman 1988; Putnam 1995; Adler and Kwon 1998) have proposed, social capital in general refers to shared norms, shared interests, network ties of goodwill, mutual support, social trust, and a sense of obligation through which people concerned can appropriate benefit or resources. Social capital is expected to encourage people to behave based on shared norms, cooperate with others for shared

interests, and engage in the process of solving social problems with goodwill and trust toward other actors.

Although the concept of social capital has a much longer existence, it has become a prominent topic of debate over the last two decades, particularly thanks to the contributions of David Coleman(1988) in sociology and Robert Putnam(1995) in political science. While the analysis of social capital has been grounded so far on the relationship among individual actors or among aggregations of individuals, Putnam shed light on civic engagement by applying the concept of social capital to cities, regions, and whole nations to explain different levels of performance between political communities. In particular, he suggested a series of properties: norms, trust, and social networks, and others, which have been widely used to analyse and measure levels of social capital. Putnam's arguments and theories have provided a theoretical foundation on which the research framework of this thesis is built.

However, he and other theorists in his line have been criticised for treating social capital as an exogenous variable, which implies that social capital cannot be created in a short period of time. Putnam asserted:

> " Once established, affluence may reinforce 'civic-ness,' while poverty probably discourages its emergence, in an interlocked pair of vicious and virtuous circles." (1993:162).

His approach has also been criticised for ignoring top-down perspectives (Maloney, Smith et al. 2000). Putnam's approach stresses horizontal networks as the location of social capital, with less consideration of the vertical

relationship between citizens and government.

This approach to social capital may be described as an “industrial age” definition reflecting only an offline reality. In the industrial era, major news and media organisations exerted a dominant influence on societies, while physical distance still restricted the ability of people to get together with others. Limitations in the public sphere and communication systems during the industrial age imposed several features upon social capital. It took much more time to build relationships forming social capital because channels for interconnectivity and information sharing were limited. Gatekeepers in major news media shaped and regulated discourse, thereby resulting in the exclusion of some population segments from discourse. The amount of information in print and on broadcast media was relatively limited for many citizens. My interpretation of classical social capital theories which treat social capital as an exogenous variable and overlook the relationship between citizens and government is that in the industrial era media users tended to be passive and their access to political information was limited.

In contrast, it can be argued that the new information age overcomes industrial age limitations in terms of social capital formation. There are virtually no limits to the amount and speed of information distributed via the Internet, widening access to new population groups. Thus the Internet opens up new possibilities for marshalling forces against dominant power systems and for shifting attention to emerging issues. Information technology has enabled the current generation to share ideas and to build consensus for action more quickly than previous generations could. In short, in the Internet era, the concept of social

capital should be understood in a different way from that in the offline world of the industrial age.

1-1-3. Korean society as a case study

Koreans have witnessed a double consolidation both of democratic institutionalization and technological revolution over the last two decades. Firstly, it can be said that Korea has made substantial advances in democratic reform: the breakdown of a dominant and authoritarian power system and the establishment of fair election process. In 1992, a civilian politician became president for the first time since 1960 in Korean history. In 1997, an opposition candidate was elected to the presidency for the first time. In 2007, the peaceful transition of political power from the ruling to the opposition party was repeated. Kim (2000) argues that “democracy is being consolidated behaviourally, attitudinally, and constitutionally in Korea“.

> *Behaviourally, no significant social group pursues the overthrow of the democratic regime. Attitudinally, the majority of Korean people believe that political change must emanate from the parameters of democratic formulas. Constitutionally, most political and social actors concur that political conflict should be resolved according to the established norms.*

Secondly, since the first commercial service of Internet access opened in 1994 in Korea, the number of Internet users reached 10 million by 1998 and rose to 30 millions in 2003 (KRNIC 2004). Internet penetration of Korea’s population reached 76.3% as of the end of 2007. Along with such expansion in the scale of Internet population, political applications of the medium have also been notable;

for example, the innovative effort of governments to deliver public services through websites; successful campaigns by civil groups to defeat electoral candidates in 2000; and the case of candle-light vigil, an Internet-supported offline demonstration, protesting against American soldiers who killed two middle-school girls in a traffic incident in 2002. These cases demonstrate that with the advance of the Internet governance can become more transparent and effective, and also that citizens are empowered for collective actions to address common concerns. The changes the Internet has brought about in Korean society draw attention to the impact of the Internet on political processes.

> In Korea, the Internet has enabled an alliance of over 300 civic organizations which exerts much influence over political dialogue on reforming the political system. The pressure of this alliance for a more transparent political system made nomination processes more open and dismantled the grip of some authoritarian leaders over the party system. The Korean case may even signal the erosion of existing power relationships and ideology, bringing about the dispersal of power previously vested in political parties and the state. The Internet and social capital have combined with powerful synergy and made possible substantial democratic progress.
>
> There is a downside, however. A state of 'moral hazard' may come about with some internet users taking advantage of anonymity to behave in negative ways that were probably less likely in the offline world or a face-to-face encounter[3]. A few activists may dominate opportunities available on the Internet to generate antagonism against

> the government, in some instances mobilising young students on to the street. The Internet does not necessarily facilitate deliberative process and can sometimes foster prejudice, extremism and intolerance.

In 2008, the new President, in office for just less than four months, declared that the Internet without trustworthiness is not a pill but a poison[4]. The Justice Minister vowed to introduce stringent measures against online libel[5].

The Korean government recently announced measures[6] for privacy protection to address public worries over the illegal use of personal information. Given the fact that public and private awareness about web security remains low[7] compared to the nation`s high internet penetration, the government called for a ban on private and public firms' collection of private information. It also took tough measures to prevent the spread of illegal and harmful information on the Internet. According to the recommendation of the Korea Communication Commission (KCC), many portal site companies should keep records of Internet users who post messages and comments and may be requested to delete or block access to malicious web postings at the request of victims.

Although such negative elements in the cyberspace should be eradicated, the effort of the state to regulate the contents of individual communication poses the danger of undermining the freedom of speech. Thus, there exist both optimists and sceptics, conflicts between freedom and regulation, and positive signs of fostering democratic values as well as negative scenarios in which extreme views and false information pervert the democratic process rather than

fostering collaboration and deliberation. Not only civil society but also political communities have taken to cyberspace, and now commercial organisations are rapidly expanding their influence over the space. It may be that diversity and uncertainty will continue to characterise the evolving virtual world. Nevertheless, an individual's fingertip makes him or her an observer or even a significant actor in the political process, expanding civil society in its width and depth. The political system can become more transparent and responsive; trust and cooperation can be established between government and citizens. Thus, the political process may become more democratic and efficient by the employment of the Internet. Korean society provides several cases worth academic attention concerning democratic consolidation and media impact.

1-1-4. Three Approaches

Many newspaper articles and pieces of academic research (Kim and Yoon 2000; J.S.Hwang, S.O.Kim et al. 2001; J.S.Hwang, Cho et al. 2002) have described how the Internet has had substantial impact on various aspects of political process, at least, in Korea, including political marketing, administrative procedures, or social movement strategies. The individual researcher is unable to cover all the issues raised in the course of social adoption of the medium in part because of the huge breadth of the potential research agenda and in part because of the relatively small stock of empirical research findings.

In relation to communication technology, Abramson, Arterton and Orren (1988) suggested that political thought can be summarised into three types of democracy in terms of different uses and regulation of the press and mass

communication: plebiscitary, communitarian, and pluralist democracy. Firstly, plebiscitary democracy has often been viewed as a reform movement against representative democracy in which, as classically defined by Joseph Schumpeter, elites acquire the power to decide by means of a competitive struggle for the people's vote. Plebiscitary democracy demands greater self-government under which individuals are empowered to choose public policies through the holding of plebiscites, referenda, and initiatives rather than simply electing representatives. The Internet makes it much easier for candidates and officials to know what public opinion on any particular issue is. In Korea, the new medium took a critical role in preventing some allegedly unfit political candidates from being elected in the 2000 general election.

Secondly, communitarian democracy is based on the idea that democracy is not a process for allowing a majority to rule over minority interests antagonistically but one in which individuals conceive themselves as citizens, sharing a common identity and purpose with fellow citizens. Unlike plebiscitary democracy, communitarian democracy requires participation, deliberation and efforts at persuasion in public space (Abramson, Arterton et al. 1988), an area or place that is open and accessible to all citizens. In the context of Internet politics, the communitarian conception of democracy seems to be more attractive than the plebiscitary one, with its stress on the communal values and empowered citizens' participation in political process. There have been some attempts to implement communitarian democracy up to a point. The nickname for the former government of Korea was Participatory Government (*Chamyeo Jeongbu* in Korean), in which the president was reputedly elected by a critical

contribution via the internet, and under which a variety of government consultative committees were established[8].

Thirdly, pluralistic democracy is held to describe the modern democratic process, based on the principle of free competition among groups. Pluralism not only describes empirically how states classified as democracies actually work but is also asserted normatively to defend free competition among groups. It rejects tyranny of the majority, seeks to tame political power and avoids stark conflicts between majority and minority. Bruce Bimber (1998), however, introduces the concept of an accelerated pluralism noting a shift toward a system of more rapidly changing issue groups, with less stability and less dependence on private and public institutional structures. With the Internet, it could be argued that users tend to care relatively intensely about a few issues while remaining disinterested and uninformed about most. Bimber (1998) argues that the internet itself does not alter the underlying degree of political sophistication or lack of it established in the minds of users. He suggests that the medium provides a greater way of mobilising latent opinions on common public issues and interest. People still tend to associate themselves in groups and structure their political participation and engagement through those associations. Faster and easier communication and information flows, however, will lower the obstacles to grass-roots mobilization and organization faced by political entrepreneurs, activists, and others, and will speed the flow of politics. Lower costs of organizing collective action offered by the Internet will be particularly beneficial for those people outside the boundaries of traditional private and public institutions, those not rooted in businesses, professional or

occupational memberships or the constituencies of existing government agencies and programs.

As Mark Bonchek (1995) observed, the Internet dramatically reduces the transaction costs involved in identifying potential contributors to a lobbying or campaign effort, mobilizing them, and coordinating their efforts. To non-profit citizen groups, strategies to maintain loyal memberships and financial support may be key factors for success. I would argue that the decreased transaction cost has made it relatively easy to apply such strategies to their political activities and to be more vigorous in collective action. Bimber (1998) argues that the Internet will contribute to an intensification of group-centered, pluralistic politics and that more rapid and more intense citizen responses to mobilization efforts by linkage groups is likely to occur.

The impact of the Internet may differ in accordance with the three approaches to democracy: plebiscitarians may stress the effectiveness of Internet communication and information technologies in opinion polling, political campaign or citizen control of government; communitarians may be enthused by the potential contribution the Internet could make to community-building and virtual community; and pluralists may emphasise the role of the Internet in reflecting a diversified society. The Internet has been employed in a variety of fields including political campaigning, e-government, and social activism. The three perspectives or approaches help us to understand and examine the modes and results of Internet application to each domain of political process. The Internet facilitates new forms of political participation either in the course of political elites recruitment, in the relationship between citizens and government,

or in mobilising collective action. The modes and results of participation may be understood either in terms of plebiscitarian, communitarian, or pluralistic democracy.

1-2. Research Plan

1-2-1. Aims of Research

Considering published literature and my own experience, I am doubtful that the Internet transforms the political process toward a certain direction in an automatic way and motivates all the individual Internet users to become political actors. Instead, the new medium seems to have political impact on only certain groups of people whom I presume to have a distinct set of psychological or attitudinal characteristics. My initial research question is what factors in individual characteristics motivate her or him to use the Internet as a tool for the purpose of political participation.

The aim of my research is thus to understand in what way the Internet influences the political process by identifying the factors that are significantly related to individuals' behaviour and attitude. Based on the assumption that social capital is a form of sustainable resource with which political processes may function in more democratic and effective ways, I would like to examine the causal relationship between those factors and selected key resources of social capital. If the relationships between two groups of variables are confirmed as significant, it can be argued that the Internet contributes to the creation of social capital. I would like to take a further step to investigate whether the Internet has a positive influence on political participation which is based on social capital. Bearing in mind the argument that social capital does not necessarily promote political participation (Newton 1999), the thesis will

attempt to examine causal relationships between online factors related to social capital and online political participation.

The title of this thesis, *Political Anatomy of Internet Users*, implies that general feature of being an Internet user does not of itself explain how the Internet influences political process. Empirical analyses of Internet users are required to understand what factors are related to the creation of social capital at the individual level and individual engagement in political process. The question will be explored whether the Internet influences the political process in various positive ways, for example, by encouraging or facilitating more people to engage in communication with other members of a community or governments. When the process operates in democratic and efficient ways, it may be said that necessary conditions for 'making political process work better' are fulfilled. By 'democratic and efficient' I principally mean that citizen preferences are expressed and transmitted effectively, both in the selection of political decision-makers and in the policies pursued.

The political process[9] is a series of interactions among a variety of actors, in which conflict and cooperation are persistently intertwined. In fact, there may well be many ways to address key issues in relation to political process, such as electronic governance or political marketing. However, I would rather focus on individual Internet users as basic units for my research. Internet users at large are participating in the process as a member of an organized group or individually. Participation often establishes a routine of interaction with other individuals, generating a shared sense of identity and leading to a stage in which members of the process come to have a sense of community. Actors

as the members of the community, such as petitioners or government officials, are interacting with each other in pursuit of their goals, for example, in formulation or implementation of policy.

Social capital matters in interactions among actors in political process. Although broader understanding of social capital includes negative forms such as the strong ties, within a criminal syndicate, in my research I would confine its concept to positive aspects, some of which are contributory to making the political process work better by resolving conflicts and promoting cooperation. Various theorists argue for the positive function of social capital in good governance and healthy civil society (Hyden 1997; Fukuyama 1999; Woolcock and Narayan 2000). Such prescriptions are chiefly based on the potential causal relationship through which social capital helps the political process work better. This thesis subscribes to the functionality of social capital in expanding political participation and increasing democratic values. Social capital arguably enhances the performance of the political process, which encourages both consolidation of democratic values and promotes prosperity by providing a stable institutional framework for economic development. Among many ways to promote democratic values, participants in the political process are likely to be more deliberative in addressing their interests and opinion and also to become tolerant of different views and conflicting values. Efficiency is enhanced because information and knowledge on common issues will be widely shared, encouraging the growth of trust and democratic norms and also helping to lower transaction costs in society.

In general, social relationships established on the Net have been distinguished from face-to-face interpersonal relationships. While *online world* refers to the former, *offline world* does to the latter. The online world is frequently described as virtual space, which stresses its nature as a non-physical counterpart to the real world in comparison with *being physical* in offline world. A significant question concerns the place in which the Internet creates social capital. Conceptual division of the two spaces may be possible but in practice the boundary between the two worlds seems to be blurred or overlapping: while online communities that have been initiated by Internet communication may strengthen their members' solidarity through off-line face-to-face gatherings, most off-line collective actions in Korea, such as candlelight vigil, have been instigated mobilized and maintained by Internet communication[10].

More significant within the scope of my research, the functions and usages of social capital need clarification. Social capital theorists seem to differ in their approaches to the functions of social capital taking either instrumental or normative approaches (Adler and Kwon 1998; Boix and Fosner 1998; Stolle 2003). The instrumental value of social capital (Baker 1990; Bourdieu 1985) pays attention to the *utility* of the resources in attaining the goals of individuals or groups. By contrast, the normative approach, as suggested by Alexis de Tocqueville in his pioneering study of American democracy, sheds light on the *healthiness* of a society with a high level of social capital. The normative aspect of social capital may have much relevance in a society, like that of Korea, which has witnessed an upsurge in the number of Internet users and in the scope of Internet-related activities over the past two decades. The Internet presents not

only the bright side but also a dark side: widespread dissemination of false or malicious information in anonymity, or vulnerability to cyber-crime and terrorism. It might be my innocent expectation to view social capital as a purifier of the chaotic cyberspace. At the minimum degree, we can take a normative approach to this issue: social capital may function as deterrent effect against the anomic state the Internet may bring. That argument is not to underestimate the importance of utilitarian side of social capital in making the political process work better.

To sum up the objectives of my research: under the presumption that social capital matters in making the political process work better, this research is aimed at identifying paths through which the Internet affects the creation and accumulation of social capital. It examines the political implications of social capital by linking individuals' behaviours in Internet use to their engagement in political opportunities the Internet offers. To do these tasks, the following three questions are to be answered.

(1) What factors are decisive in determining the modes in which individuals use the Internet? In other words, what factors explain individual behaviour in the general use of the Internet? It is assumed that some internal attitudinal factors, other than conventional demographic factors, help explain explicit behaviours of individuals in their daily use of the Internet. The use and gratification theory[11], which focuses on media users' needs in the fulfilment of their communication goals, offers a relevant analytical framework through which internal motives best explain the behaviours of individuals, in media use as well as

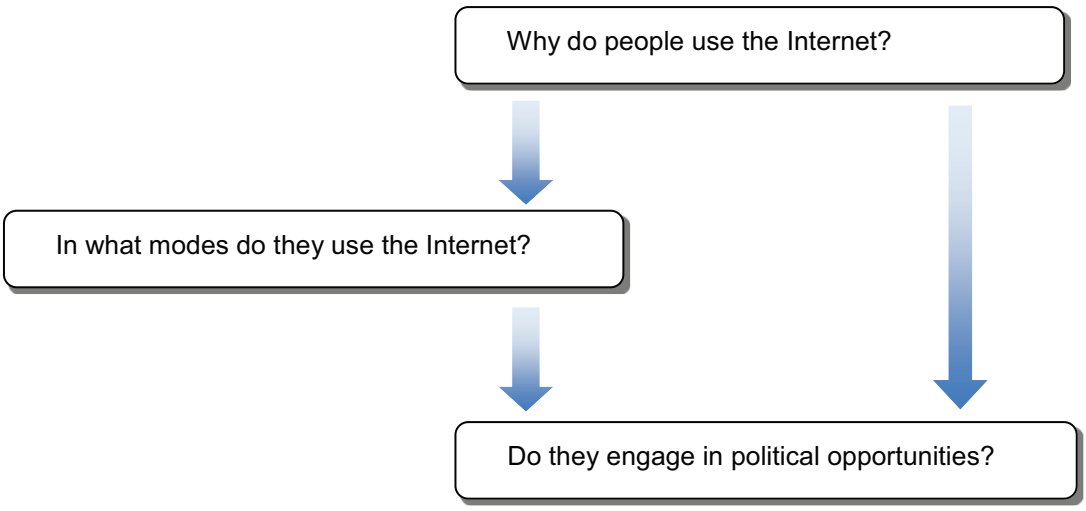
participants in political process. A set of empirical data will be produced and analysed in relation to these variables.

(2) What behaviours, or what mode of Internet usage, constitute a set of favourable conditions under which social capital at the individual level is most likely to be created and accumulated? How do such conditions relate to the internal factors that determine the mode of individual's Internet use? According to one theoretical framework (Nahapiet and Ghoshal 1998) for the explanation of communities of knowledge, the approach to the sources of social capital is to be taken at the multiple levels: cognitive, relational and structural ones. The recognition of common interests has been attributed to social capital, and also the establishment of social networks based on interpersonal ties, as well the propensity to engage in online communities which can both be expanded in themselves and related to offline social life.

(3) We need to ask whether, indeed, social capital affects political participation. How do Internet users perceive new forms of political opportunities that the Internet induces? Do they utilize and practice political opportunities individually or collectively to attain their common goals? How do they assess the effectiveness of such opportunities? These questions reflect our concern with political relevancy of social capital, in particular, its role in the political process.

The three main research objectives can be displayed in the following conceptual diagram:

Chart I-1 Conceptual Relationships of Research Questions



I used some selected internal needs for Internet use as independent variables, which prove to be more powerful indicators than other characteristics of Internet users, such as intensity of Internet usage or duration of Internet use, in explaining the behaviours or attitudes of Internet users. A set of the internal needs were drawn by analysing the reasons that they are using the Internet. The internal needs encouraging individuals to obtain information and socialise with other members of society are more likely to contribute to the creation of social capital, compared to entertainment seeking needs. Such informational and social needs show positive causal relationships with the online sources of social capital at the cognitive, relational and structural dimension. The sources of social capital are assumed to take their forms according to the modes of individuals' daily use of the Internet. The sources are composed of frequency of visiting the websites of governments or political parties, strength of interpersonal ties, and trust in online communities. I would separate online

forms of political participation from conventional methods of offline participation. Given a wide variety of means for online forms of political participation, I confine the variables of online political participation to individual's engagement in new political opportunities given by Internet driven changes on political process: easy access to political information, direct contact with political decision-makers, online delivery of public serves, and effective mobilisation of collective actions. I assume that individuals' engagement in political opportunities online is an indicator showing the level of individuals' practice of online political opportunities and their evaluation of the opportunities. This thesis confirms significant causal relationships between internal needs for information acquisition and social networking, between the sources of social capital and online political engagement, and between the internal needs and online political engagement.

1-2-2. Importance of the Subject

It could be objected that it is nothing new to examine the political implication of Internet communication. It seemed to be rather a fresh issue at the time when this research started, but debate over the political impact of the Internet has now become rather familiar. But as the internet develops, so does its political potential, as the innovative use of the internet by Barak Obama in 2008 testifies (Miller 2008). Meanwhile, empirical studies with different approaches but similar subjects have been conducted, some of which touch on the issue of the connection between social capital and Internet use in Korean society (e.g. Kim and Yun 2007). However, the following points may be made concerning this research project.

This thesis, first of all, sheds light on a fascinating case of Korean society in which democratic consolidation has been carried out over the last two decades. Despite initially poor economic and technological infrastructure the Internet penetration rate of Korea has now reached around three-quarters of the whole population in ten years since commercial service of the Internet began, outrunning several counterparts in established democracies[12]. In particular, sustained democratisation in Korea can be attributed in large measure to a bottom-up social movement by civil society, rather than by negotiation among political elites. The Korean case was chosen as a representative case to show the role of the Internet in the course of democratic consolidation which in particular involves reforming of political process.

Secondly, the research takes not only a descriptive approach but also a prescriptive one to the subject of Internet impact on political process. With awareness of post-industrial changes over modern society and democratic process, I will discuss what changes the Internet is making in interpersonal relationships and what actions should be taken to make the relationship between the citizens and the government more trustful and productive. I am suspicious of the intentions of those Internet users who post messages containing false information to portal sites or other online public space.

Thirdly, my research may be one of relatively few attempts to link internal factors to the mode of Internet use and to individual engagement in political opportunities. The research is based on only two assumptions; firstly, that different individuals use the Internet in different ways and secondly, that the aggregation of individual social capital may be comparable to the amount of

social capital at large in a society.

Lastly, examination of Internet impact on social capital seems to require a new conceptual definition, which fits research findings better than the classical approaches. The new approach needs to be multi-dimensional because people in general use the Internet not just for entertainment or to obtain information like television nor only to connect with others like telephone. Unlike the old era media, the internet is multi-functional, including information search, communication channel and a sort of virtual town hall. People may surf for information, exchange email with their friends, or join online communities. Each function of the Internet may affect the source of social capital at the cognitive, relational and structural dimension. I will be adventurous enough to propose a definition which hopefully incorporates all the dimensions and effectively fit my research model.

1-2-3. Approaches and Methodology

To serve the research goals of examining Internet impact on the creation of social capital and on democratic and efficient political processes, the research will proceed through the stage of model building in which a variety of theories and theses are reviewed and synthesised, the stage of data collection in which surveys are conducted to collect relevant data to support those theories, and the stage of data analysis in which various ways of statistical analyses are employed to handle and process the data collected for hypothesis testing.

Firstly, the model building examines a range of theories involved in the issues of Internet use, the creation of social capital, and the performance of political

process, and then designs an analytical framework to facilitate data collection and hypothesis testing. The three research questions in Chart 1-1 are starting points for model building: why do people use the Internet?; in what ways do they use the Internet?; and to what extent do they engage in political opportunities for political participation? The first question involves explanatory factors which are of importance in the research process as a whole in that exogenous variables are used to explain both the creation of social capital on the Internet and the level of engagement in the political process. Under the theoretical framework of the use and gratification model, I would like to employ the approach that Professor Oh and other researchers used in analysing Korean Internet users (Oh, Kim et al. 2000). Their findings from the case of Korea confirmed the classification of Internet users by other researchers, such as Fisher and other colleagues (Fisher, Margolis et al. 1996). It seemed sensible to adopt an established research approach for analysing this particular part of my research model. I used a similar type of questionnaire for the survey and derived the same factors in the motives for Internet use. By employing this approach, my research can be said to extend the academic work of Professor Oh and his colleagues, for which I am grateful to them.

The second research question requires a multiple-dimension approach: for part of the research, I employed the framework through which Nahapiet and Ghoshal investigated the sources of social capital at the cognitive, relational and structural level (1998). In addition, other theories and theses are employed to identify variables responding to the second research question.

The third research question concerns the changes the Internet has caused

within the political system, which seems best explained by the theory of the political opportunity structure (Kitschelt 1986; Kriesi 1995; Sekhon 1996). The methodology here is to tap behavioural and attitudinal aspects of individuals' engagement with new political opportunities and to set these up as dependent variables.

The second stage of the research design involves the method of data collection, which presents significant problems for Internet research. The target population of this research are those people who use the Internet regularly, for whom e-mail and web-based surveys can be effective for collecting data. I engaged Internet survey specialists to collect data with a questionnaire which I designed. The survey specialists maintained a representative database of respondents in terms of internet users, recruiting new respondents into the database by invitation. The survey produced a dataset of 1150 cases, showing a comprehensive range of internet users, in terms of their demographic characteristics, and their involvement with both online and offline social capital. However, as will be discussed the structural equation model chosen as a methodology to analyse the data, revealed significant problems; the mode of the variable for engagement in political opportunity is binary, which is not appropriate for the structural equation modelling. The data on which this dissertation is mainly based was the obtained through a second contract with the specialist internet survey team in 2005. The quality of the second data set is higher than the first because the survey team used advanced tactics to exclude invalid cases such as people who responded casually to questions by checking the length of time people took to respond to the whole set of questions.

Lastly, the data sets are statistically analysed. This involves characterising the data, identifying factors and explaining the findings. Analysis of the data leads to the main theme of this dissertation: the political anatomy of Internet users. With regard to the identification of factors, exploratory factor analysis is followed by the structural equation modelling to confirm the factors and paths in the influence of individual Internet use over the creation of social capital and political process. Then, Internet users are clustered in terms of those factors and relationships, demographic backgrounds and other variables are identified where they appear meaningful, for example, whether respondents voted in the presidential election or in previous general elections. Logistic regression analysis of the data is used, in order to unravel the political implications of the factors and paths identified in the data sets.

1-3. The structure of the thesis

Except for Chapter One (Introduction) and Chapter Six (Conclusion), the main body of this thesis is divided into two sections: theoretical and empirical. The theoretical section provides a comprehensive review of existing theories and analyses of relevant official datasets produced and publicised by government agencies, such as the Ministry of Information or the National Internet Statistics Agency. In addition, this section presents a conceptual framework in a form of synthesised theories, which functions as theoretical underpinning for the model tested empirically in the next section. The second section is composed of two chapters, which cover hypotheses testing by means of the result of the structural equation model analysis, and the interpretation of key findings from the data analyses.

In the ***Introduction***, I seek to touch on many points related to the research background and fundamental logic of my ideas, which drawn together constitute, directly or indirectly, the research model. This preliminary approach to Internet politics, leaves detailed discussion of related theories to Chapter II, and introduces the concept of social capital, as a set of conditions under which the political process operates in efficient and democratic ways, in relation to civil society. This first chapter justifies the goals of the research and then seeks to set out the research goals clearly.

The research investigates the conceptual and empirical relationships among three variables: Internet use, social capital and political participation. Social capital functions as a bridge between Internet use and political participation.

That is, it is presumed that social capital is a contributory factor to setting conditions under which political process operates in participatory ways. To repeat, social capital can be created as a residual product in the course of individual Internet use and aggregated social capital at the collective level affects political processes at large. Thus, the fundamental issues converge on the impact of the internet on social capital and the implication of social capital in the context of participatory political process. It is the aim of **Chapter II*, the Internet, Social Capital and Political Participation,*** to concentrate intensively on the most important subjects: social capital and political participation. In the discussion of social capital, it is of importance to review critical arguments against the classical social capital theories. Such criticisms seem to supplement the shortcomings of, for example, Putnam's thesis: his treatment of social capital as an exogenous variable, or his emphasis principally on horizontal social networks, ignoring top-down government influence in the creation of social capital. In relation to the critical review, the functions and roles of social capital in relations between citizen and government may also be necessary in building the research model. Then, I will summarise articles which deal with whether the Internet increases or decreases social capital. Such theoretical review will be followed by the proposal of a new definition of social capital at the end of the section, which is not to be generalised but modified for the purpose of building research model.

Chapter III, *the Theoretical Foundation of the Research Model*, introduces various theories which will be employed in building the research model. Firstly, the use and gratification theory offers a theoretical framework on which internal

motives for individual employment of the Internet can be identified, and which function as a set of exogenous variables in research model as a whole. Secondly, the modes of Internet use, as the sources of social capital, are to be investigated at the cognitive, relational and structural dimensions; at the cognitive dimension individuals' knowledge of common public issues may be explained by the virtuous circle thesis (Norris 2000); at the relational dimension the properties of interpersonal relationship can be analysed by the theory on the strength of social ties (Granovetter 1973); and at the structural dimension key issues, including trust, related to virtual communities can be discussed in connection with some existing theories of community (Etzioni 1993; Cortese 1997; DeFilippis 2001; Blanchard and Markus 2002). Thirdly, it is argued that the Internet affects the political opportunity structure by expanding openness and transparency. Although the theory of political opportunity structure (Kitschelt 1986; Tarrow 1994; Kriesi 1995) has evolved in the study of political movements, it also seems to be valid in the examination of normal political processes based on Internet communication. That is, the changes the Internet has caused in the political opportunity structure may affect significantly the political process as a whole.

Chapter IV, *the Structural Equation Model Analysis*, is an opening chapter of the section for empirical analyses, which starts with the description of the research model including the explanation of variables and data involved in the model. The main part of the chapter is to describe the procedure of the structural equation modelling, which is divided into two steps, the confirmatory factor analysis and path analysis model, because the number of the variables

involved is too large to be integrated into a unified single model. Structural equation modelling is an advanced statistical methodology which makes it possible to confirm causal relationships between independent and dependant variables, in contexts difficult for other statistical methods. The result of the analyses tests ten hypotheses describing the relationships between motives for Internet use and the modes of Internet use, between the modes of Internet use and engagement in political opportunities and between motives for Internet use and engagement in political opportunities.

Chapter V, *Political Anatomy of Internet Users in Korea*, which is in a sense the climax of the whole dissertation, highlights the interpretation of the findings from the structural equation model analysis in Chapter IV and other evidence from the logistic regression model and cluster analysis. All the samples will be categorised in terms of the eight latent variables drawn in the confirmatory factor analysis, three motives for Internet use (informational needs, social needs and emotional needs), two modes of interpersonal ties (weak ties and strong ties), trust in virtual community, and two kinds of engagement in online political opportunities (practice and evaluation of political opportunities). If the normal distribution of the sample is accepted, the clusters of Internet users will reflect the whole population of Internet users in Korea. The properties of each group will be described based on some key criteria, such as demographic factors or years of using the Internet.

The logistic regression analysis will show what factors among those latent variables and other two measured variables, frequency of visiting public websites and entertainment sites, have significant relationships with

participation in the presidential and general elections. In addition, using the data collected in the 2002 survey, I will conduct the second wave of the logistic regression analysis to link engagement in online political opportunities to offline factors of social capital, political capital, and the conventional media. The last two analyses of the logistic regression model are intended to provide interesting findings about the relationships between less political factors of general Internet use or social capital and real political activities. Chapter Five therefore seeks to examine the political implication of the factors considered, in other words, the political anatomy of Internet users in Korea.

In the last chapter, ***Conclusion***, I will summarise the key findings and important discussions in the previous chapters and evaluate outcomes of the research. In addition, it will address the limits of my research and suggest the directions for the future enquiry.

Part I

Theoretical Discourse

Chapter II Social Capital and the Internet

2-1. Overview

Broadly speaking, my research is within the field of Internet politics with a focus on the impact of the Internet on political process. Inspired by the arguments of social capital theorists such as Robert Putnam and James Coleman, I became very interested in the function of social capital in making the political process work better. They have argued that, when a society accumulates high degree of social capital, cooperation will increase and collective action dilemmas will decrease. Despite many harmful elements in cyberspace, such as hacking and computer viruses, and the nature of virtual community, often involving shallow and transient interpersonal relationships, the development of social capital would seem to be an important way in which the Internet could contribute to the effective operation of the political process. Yet with all its beneficial functions, the Internet may not succeed in establishing a sustainable environment within which a government can fulfil its committed goal of electronic government. Can the political process of a society, moreover, work democratically and efficiently without social capital?

This chapter is the first of two reviewing relevant theories. While the next chapter presents a variety of theories and theses directly employed in modelling, this chapter deal with fundamental issues; social capital and Internet impact on social capital and political participation. I tried to add small segments of literature about the Korean experience to a general review and discussion of each subject, which is intended as a kind of warming-up before fuller empirical analyses of the Korean case in Chapter 4 and Chapter 5.

At the end of Chapter 2, I will attempt to propose an operational definition of

social capital which seems more appropriate for Internet politics and which dictates the whole direction of modelling in my research.

2-2. Social Capital

2-2-1. Definitions

The term ‘social capital’ was coined by Hanifan in 1916 for the first time to refer “to that [capital] in life which tends to make these tangible substances count for most in the daily lives of people: namely good will, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit…” (Woolcock and Narayan 2000; Putnam 2002). Since Hanifan’s invention of the term, the usage of the term has been confined to a few analysts, mostly in dealing with economic issues, without gaining much popularity. In the 1990s, however, James Coleman and Robert Putnam made critical contributions to a revival of social capital theory respectively in sociology and politics

A literature review reveals that there are two groups of theorists who take different approaches to the concept of social capital. The first approach focuses primarily on social capital as a resource facilitating action by a focal actor, a resource that inheres in the social network tying that focal actor to other actors; the substance of social capital may be resources, such as information, ideas, or support, that individuals can procure by virtue of their relationship with other people (Coleman 1988; Bourdieu 1997; Portes 1998; Lin 2001).

The second approach views social capital as a feature of the internal linkages that characterise the structures of collective action, providing participants with benefits; social capital thus refers to the nature and extent of one’s involvement in various informal networks and formal civic organizations (Putnam 1993; Fukuyama 1999). From regularly meeting neighbours or engaging in

recreational activities to joining collective actions, social capital in this sense is used as a conceptual term to characterize the various ways in which the members of a given community interact with each other. While the former approach may be reflected in the ego-centric variant of network analysis, the latter one is based on the socio-centric variant of network analysis (Adler and Kwon 1998). The classification of the definitions of social capital may be linked to the two perspectives on who accrue the profits of social capital, individuals or groups (Lin 2001). The one perspective is how individuals access and use resources embedded in social networks to gain returns in instrumental actions or preserve gains in expressive actions. The other perspective is that social capital as a collective asset enhances cooperation among group members and the chances of attaining their goals. With the agreement of most scholars that social capital is both a collective and an individual good, Lin (2001) argues that social capital as a relational asset must be distinguished from a collective asset, and from goods such as norms or trust even if the two concepts may be causally related.

Bourdieu (1997), one of prominent theorists who took the first approach, defined social capital as 'the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition…which provides each of its members with the backing of collectively-owned capital'. He understood that social capital, like other forms of capital, has its own capitalists, who accumulate social capital in the form of relationships, networks, and contacts[13]. Bourdieu's work on social capital did not present a fully-developed

theoretical framework but did make a crucial contribution to establishing a field of study (Schuller, Baron et al. 2000).

It can be said to be James Coleman who helped make the concept of social capital widely accepted across many fields of sociology and economics (Schuller, Baron et al. 2000). Arguing that social capital has a profoundly beneficial effect on the acquisition of educational outcomes, he defines social capital as 'a particular kind of resources available to an actor', comprising a variety of entities which contain two elements: 'they all consist of some aspect of social structures, and they facilitate certain actions of actors – whether persons or corporate actors – within the structure' (Coleman 1988). In particular, he asserts that the concept of social capital identifies certain aspects of social structure by their functions (Coleman 1988).

> *"The function identified by social capital is the value of these aspects of social structure to actors as resources that they can use to achieve their interests"* (Coleman 1988).

He also stressed the merits of such approach to the concept:

> *"By identifying this function of certain aspects of social structure, the concept of social capital constitutes both an aid in accounting for different outcomes at the level of individual actors and an aid toward making the micro-to-macro transitions without elaborating the social structural details through which this occurs."* (Coleman 1988).

The capital is comparable to a sort of resources which can be described as

'social' in that they are only accessible in and through these relationships, unlike physical capital, such as tools or technology, and human capital, such as education or skills capital, for example. Such features of interpersonal relationship may be essentially the property of individuals. The structure of a given network has much bearing on the flow of resources through that network. Those who occupy key strategic positions in the network, especially those whose ties span important groups, can be said to have more social capital than their peers, precisely because their network position gives them heightened access to more and better resources (Burt 2000).

Robert Putnam has popularised the concept of social capital and can claim responsibility for its entry into mainstream political discourse (Schuller, Baron et al. 2000). In the second approach, Putnam (1995) defined social capital as the "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit." Social capital may be understood as the web of cooperative relationships between citizens that facilitates them to resolve action problems (Putnam 1993). Fukuyama (1999) contends that social capital is critical for successful democracy in that social capital is what permits individuals to band together to defend their interests and organize to support collective needs; authoritarian governance, on the other hand, thrives on social atomization.

Bourdieu made attempt to generalise the concept of *capital* in explaining intangible resources collectively owned by members of society, Colemen contributed to wider understanding of social capital concept in the context of social structure, and Putnam provided the functionality of social capital in

political process. In particular, Putnam argues that “characteristics of civil society affect the health of our democracies, our communities, and ourselves…the relevant characteristics of civil society – the contours of social capital – vary systemically across time and space” (Putnam 2002).

2-2-2. Social Capital and Civil Society

Recently, increasing attention seems to be drawn to the premise that democracy is good for economic development (Hyden 1997; Dasgupta and Serageldin 2000; Woolcock and Narayan 2000). This argument is contrary to the traditional notion that the democratic process may be ineffective in the implementation of public policies. However, observers argue that democracy may be a causal factor of development[14]. This perspective is preconditioned by a close relationship between the concepts of the two terms, *social capital* and *civil society*. The former refers to the normative values and beliefs that citizens have in their everyday life: what Tocqueville in the early 19th referred to as “habits of the heart and the mind.” These habits provide reasons and design criteria for all sorts of rules. Constitutional arrangements, laws, and regulations may not work without values and norms being embedded in individuals, groups and communities in a society, and thus upheld by them. In turn, civil society can be viewed as the forum in which the habits of the heart and the minds are nurtured and developed. In this sense, the concepts of social capital and civil society are an instinctive analytical framework, seemingly independent of development but in practice necessary to achieve democracy and development (Hyden 1997).

The relationship between social capital and civil society are furthered by Lucian W. Pye (1999) in examining Asian values through an analytical framework composed of civility, social capital, and civil society. He argues that the particular *civility* norms of a country either facilitate or impede the accumulation of *social capital*, the amount of *social capital* amassed by a society sets the stage for the emergence of a healthy *civil society*, which in its turn provides the dynamics for democratic politics (Rotberg 2001:376). Civil society is 'the forum' (Hyden 1997) in which social capital is nurtured and thus civil society becomes 'conditioned' by the accumulation of social capital (Pye 1999).

In fact, recently, a huge number of scholars have worked on explaining the "third wave" of global democratisation, spreading across many countries of Southern Europe, Latin America, Asia, Africa, and the former Soviet bloc; seeking to comprehend the causes, explicate the process and predict the future of these emergent democracies. Among different approaches, explanation of such democratic transitions and consolidations in terms of civil society gains much attention. Various definitions of civil society do not seem to vary much on whether civil society is beneficial to democratic development. It seems to be common ground among theorists that, a broad and strong consensus within civil society plays a very positive role in preserving, protecting and enhancing democratic values. Civil society instils cherished values of a society and civic norms of behaviours: it disseminates information and facilitates citizens' collective pursuit of their interests; it facilitates the sharing of expectations with other members of society and provides multiple channels for identification, articulation, and representation of interests; and it also serves to govern the

behaviour of its members with regard to collective commitment. The role of civil society may be beneficial to public authorities; it supplements political parties[15] and helps to recruit and train political elites; it helps give citizens respect for the state authorities and encourages positive engagement with it; and it also sustains the power of democratic governments by providing important reservoirs of potential resistance to arbitrary or tyrannical action by rulers (Diamond 1996).

Many theorists have emphasized the importance of civil society in the political process[16]. There is nothing new about claims for the virtue of civic associations and their capacity to perform many functions where states and the market fail (Norris 2000). Pluralist theories popular in the 1960s emphasized the role of interest groups in aggregating and articulating public demands, providing multiple alternative channels of political participation linking citizens to the state (Norris 2000; Kaviraj and Khilnani 2001). In the 1980s, social movement theorists began to put emphasis on the role of more diffused organizations, such as those of the environmentalists, feminists and the peace movement (Norris 2000). These were seen as reflecting post-modern social values, in particular, for the younger generation, as well as increasingly widespread organisational capacity to facilitate and encourage community activities (Putnam 1995; Putnam 1996; Putnam 2002).

While civil society may be a setting, in which citizens engage with formal institutions in the political sphere[17], social capital is also related to the mode of ordinary people's everyday dealings in relations with others.

Formal and informal groups are believed to promote interpersonal trust, fostering the capacity to work together in future, creating the bonds of social life that are the basis for both civil society and democracy. Organized groups not only help people to achieve instrumental goals, in the process of doing so, they also create the conditions for sustaining further collaboration, or *social capital*.

2-3-3. Key Elements

Despite varied definitions of the concept of social capital, the academic literature suggests five elements which should be taken into consideration by researchers as well as policy-makers (Adler and Kwon 1998): *network, norms*, and *trust* are taken from Putnam's analysis, and *beliefs* and *institutional structure* are added to them in consideration of the political aspects of social capital and also the specific situation of Korean society.

(1) *Network* often simply means interpersonal relationships in which interactions may occur and the memberships of groups are established. Network theorists argue that social capital is closely related to the specific structures of these networks because social networks influence a focal actor's social capital both through the actor's direct ties and through indirect ties. In fact, the actor's social capital is affected by the overall structure of the broader network within which they are embedded (Burt 2000; Webster, Freeman et al. 2001).

(2) *Shared norms* are said to be important in determining the amount of social capital (Adler and Kwon 1998). Some analysts focus on the

norms of *generalized reciprocity* (Putnam 1993; Portes 1998): “I’ll do this for you now, knowing that somewhere down the road you’ll do something for me” (Putnam 1993). This norm of generalized reciprocity resolves the problems of collective action and binds communities by transforming private interest seekers into the members of a community with shared interests and a sense of the common good (Adler and Kwon 1998). Among the same lines, Lucian Pye (Pye 1999) employs the term *civility* to signify the “rules of game” or “standard of behaviour” in a society, which serves as a foundation upon which social capital can be raised.

(3) There appears to be some confusion in the literature as to the relationship between trust and social capital. While some authors equate trust with social capital (Fukuyama 1995; Fukuyama 1998), others see it as a source of social capital (Putnam 1993), and some as a form of social capital (Coleman, 1988). As Adler et al (Adler and Kwon 1998) put it, trust is a psychological state of individuals, and social capital is an aspect of social structure. Weak ties in sharing new information do not require a high level of trust but may be sustained just by common interest. That is why trust should be treated as a different dimension from social capital itself.

(4) To know is to believe. In the literature on classical social capital theory, the role of *belief* has received relatively little attention. Nahapet and Goshal (2001) view beliefs as shared strategic visions, interpretations, and systems of meaning, which are distinct from normative value

orientations. In the absence of shared meanings or goals, it is difficult to see why or how people would collaborate.

(5) *Institutional structure* involving formal institutions and rules can have rather direct influence on social capital (Levi 1996). Social capital is more likely to develop under the condition that some virtuous factors, such as transparency, fairness, and rationality, are retained in governmental procedures. Since Korea's democratic consolidation in 1987, the government has allowed a broad range of activities by civil movement groups and activities by those civil groups have created social capital (Byun, 2000). In particular, following an e-government project, the government provides many channels through which citizens' input may be transmitted in the form of electronic consultation forum. As the government becomes more inclusive, NGOs and interest groups have broadened the scope of their activities. More and more academics and professionals have joined civil movement groups and other NGOs. As those civil organizations have steadily obtained public credibility, more and more individuals visit the websites of those public organizations and enrol as members. Where Korea is concerned, it can be said that recent developments in institutional structure established a condition under which social capital is more likely to be created and maintained than in any other era.

2-2-4. Diversity in Forms

The forms of social capital may be dependent on strength, formality, or density

of social networks (Putnam 1993; Putnam 1995). Firstly, the strength of interpersonal ties seems to decide between *bridging* or *bonding* forms of social capital. Bonding social capital refers to the links between like-minded people, or the reinforcement of homogeneity. It builds strong ties, but can also result in higher walls excluding outsiders who are not qualified. Bridging social capital, by contrast, refers to the building of connections between heterogeneous groups; these are likely to be more fragile, but more likely also to foster social inclusion.

Secondly, the formality of social network may contribute to determining the nature of social capital. In general, labour unions or PTAs are formally organised, with membership requirements, dues, regular meetings and so on. In contrast, hobbyists' groups tend to be highly informal. Both constitute networks in which reciprocity can be developed, giving private and public gains. The performance of a working team in a company may be related to the different types of social capital: some of them are supported by informal networks and other aspects may be determined by official policies. The level of trust may be affected by informal relationships among the members of the team but the effectiveness of cooperation may be decided by the mode of work allocations.

Thirdly, the production of thick and thin social capital (Putnam 2002) may be dependent on the density of social network: thick social capital can be observed in the case of a group of steelworkers who work together every day at the factory, go out for drinks after work; and thin social capital may exist in the nodding acquaintance. While thick social capital is related to strong ties, which

are defined in terms of the frequency of contact and closeness, thin social capital may be based on weak ties (Granovetter 1973), which are established by passing acquaintance where there are few friends in common. Weak ties may also be better for knitting a society together and for building broad norms of generalised reciprocity. Strong ties may be better for other purposes, such as social mobilisation and social insurance (Putnam 1993; 2002).

2-2-5. Functions in Political Process

According to Putnam people's active engagement in civil associations is conducive to the effectiveness and stability of democratic government "both because of their *internal* effects on individual members and because of *external* effects on the wider polity" (1993: 89-90). By *internal effect,* he seems to refer processes within an association or organisation, in which cooperation, solidarity, and public-spiritedness among members are nurtured by helping them obtain skills of cooperation as well as a sense of responsibility for collective efforts. *External effects* refer to the way in which a dense network of secondary associations embodies and contributes to effective social collaboration for interest articulation and interest aggregation (Putnam 1993). Putnam argues that political elites in a democracy with a high level of social capital are supposed to work under the watchful eyes of citizens who may be more supportive in some cases and more critical of poor government performance in other case (Putnam 1993). A good government is expected to foster strong linkage between citizens and the government, setting conditions under which more people are engaged in civic community life and participating in the

political process (Putnam 1993). The participatory political process encourages actors to become cooperative and tolerant. When representative governments are effectively performing, the public confidence in the working of public institutions increases, eventually leading to diffuse support for the political system (Pharr and Putnam 2000).

Despite Putnam's explanation of internal and external effect, the functions of social capital in the political process do not seem to be clear enough to support the assumption in my research that social capital matters in making political process more effective and democratic. Many analysts have pointed out the absence of empirical evidences to support this argument (Boix and Fosner 1998; Burns and Kinder 2000; Norris 2000; Puchs, Minnite et al. 2000). Government as a form of social institution takes a critical role in developing social capital in its relations with citizens by establishing social environment, even if the detailed process of how government nourishes social capital does not seem to be clear in Putnam's theory (Maloney, Smith et al. 2000; Norris 2000).

It is necessary to elaborate the mechanism by which the ability of people to cooperate, a core element of social capital, affects the performance of the governmental institutions. Carles Boix and Daniel Posner (1998) proposed five models explaining how the cooperative capacity of society facilitates a good performance of its political institutions. It may be useful to review their models and to assess how relevant they are to the empirical analysis, which is largely absent in existing theories of social capital.

The Perfect Competition Model

In a perfectly competitive democracy where voters are well informed, prompt to mobilize and eager to punish underperforming elected representatives at the ballot box, elected political elites will work harder to govern effectively, lest they be removed from office at election-time. As the effective operation of political institutions depends on the ability of citizens to hold elected representatives accountable for the quality of the governance they provide, social capital will produce good governance to the extent that it makes citizens 'sophisticated consumers of politics'. This first model is not a new one: Putnam's internal and external effects incorporate the ideas that social capital holds politicians more responsive than otherwise and simulates interest articulation. Nevertheless, this model is mostly related to the nature of civil society and worthwhile to study in relation to the case of campaigns by social groups against allegedly unfit and corrupt political candidates in Korea.

In addition to making citizens better informed and building their qualities of judgment, social capital contributes to effective governance by facilitating the articulation of citizens' demands. Not all the citizens are given equal opportunities to articulate their interests. Rather, well-organised interests will be effectively input into the policy process. In civic communities, citizens will be better able to overcome the collective action dilemmas which stand in the way of organizing groups that can articulate their interests to the government. The role of social capital in the organisation of interests becomes crucial.

The Rule Compliance model

This model emphasizes the way that social capital reduces the costs of enforcing and implementing governmental policies and regulations. This model emphasizes social capital's role in reducing transaction costs in the arena of citizen–government relations. Without social capital, the nature of public goods would discourage people from being the only ones who pay the taxes or bear the cost of complying with regulations. To secure compliance, governments may have to create complex and costly mechanisms of enforcement. Social capital reduces the need for such mechanisms by shaping the expectations that citizens have about others' behaviour. By giving citizens more optimistic expectations about the behaviour of their fellow citizens, social capital can relieve the government from the burden of enforcing compliance and free up resources that can be applied towards increasing the efficiency or expanding the range of the services that it provides.

This model emphasises trust, which is shared by members on horizontal networks, as a key factor shaping the expectations that citizens have about others' behaviour. However, the vertical networks between citizens and government involve more complex and sophisticated factors convincing citizens of government's rationality in formulating the policy. Given findings that there is no convincing evidence to confirm the relationship between social capital and political trust (Newton 1999; Puchs, Minnite et al. 2000), this model is less likely to explain empirically the relationship between social capital and the performance of government. It seems to be illuminated in the recent case that although the current Korean government has implemented policies to control

the price of real estate[18], people do not trust the stated goals of the policies and take advantage of the weak points of the regulatory measures. The case suggests that compliance with official rules is weakened by the absence of social capital.

The Community-oriented model

This approach emphasises the role that social capital plays in enhancing citizens' preferences for collective benefits rather than particular interests. In addition, the presence of abundant social capital in a community may also discourage demands for short-term consumption-oriented expenditures, but it may encourage and mobilise citizens into supporting policies for long-term effect, which will improve the lives of community members in the long run.

This second model seems to rely on the communitarian nature of social capital. However, Fuchs *at al* (2000) point out that communitarian values have not dominated political organisations and local politics. While *communitarian* forms of political participation imply that individuals engage in political activities to pursue a common interest with their neighbours or to build consensus to achieve shared political values, another form of democratic political participation is *adversaria*l, which is motivated by self-interest (Fuchs, Minnite et al. 2000). They argue that social capital, as currently formulated, fails to recognize that community based political participation has its roots in political conflict as well as in consensus building experiences. As a consequence it is not an entirely adequate concept in explaining the decline of political participation in poor urban communities. In this regard, this model has a limit in

applying the conceptual framework of social capital to the current society of Korea, in which a variety of interests are competing with each other in the course of democratic consolidation.

The Organisational Model

This model shifts attention from community to the organisation of government: an organisational promoter of effectiveness and work ethics. In other words, social capital affects the quality of public service by making changes in the working environment as well as the behaviours of elites. High levels of social capital among organisation members creates a working environment that can enhance productivity by affecting the expectations that each member has about the behaviour of his or her colleagues and supervisors, reducing temptation to engage in opportunistic behaviour. Trust between managerial and working levels of a government will reduce costs in monitoring and sanctioning in the operation of the organisation. Without trust, the provision of collective goods will be slower and more expensive than in a more civic polity.

One researcher has examined the relationship between components of social capital at organisational level and variables related to the effectiveness of organisation (Park 2003). The study, which is based on a survey within Korean government, suggests that such consequences of organisational social capital as organisational *collaboration* and *commitment* are conditioned by behavioural antecedents such as *democratic leadership*, *participation in organisation*, *protestant work ethic*, and *individualistic/ collectivistic organisational culture*. That is, organisational social capital reflects the degree of organisational

collaboration and commitment. Thus, a complex of relationships including structural, relational, and contextual organisational social capital enables the members of the organisation to work together and express high levels of effort for the organisation. Through this process, Park (2003) argues, organisations can be managed successfully.

The Social Integration Model

Boix and Poisner (1998) argue that social capital fosters accommodative practices among otherwise antagonistic elites. This model applies to a special subset of countries and institutional arenas in which problems of good governance are compounded by the fact that citizens are frozen in antagonistic ethnic, religious or class blocks. In most cases, consociational institutions have been introduced to try to resolve problems aggravated by rigid social cleavages. However, in addition to the influences of formal institution, the outcome of consociational institutions may be conditioned on two non-institutional factors: the commitment of faction leaders to making the system work, and the ability of these leaders to make necessary compromises without losing the support of their group members. Boix and Posner argue that these key enabling conditions will depend on the endowment of social capital possessed by the society concerned.

Burt's structural hole thesis focuses on managers' ability to take advantage of their position in the structural hole for integrating different information they have collected from different sections of organisations and for utilising the information to exert their influence over the whole organisation. The role the

managers take in the structural hole may be analogous to what consociational institutions conduct in conditions of deep social cleavages.

Of course, the negative forms of social capital may reinforce communal divisions and reduce the incentives for group leaders to compromise in their dealings with one another. However, Boix and Poisner argue that when stocks of social capital reach very high levels, this effect may be reversed (1998). In 1998 when Korea faced a painful economic crisis the government of Korea established the Korea Tripartite Commission[19] as a form of consociational institution, the purpose of which was to create a platform on which labour and management could participate in the formulation of government policies to overcome challenge the economic facing the country, and achieve social integration on the basis of social partnership between labour, management and government (http://www.lmg.go.kr/eng/about/about01.asp). It has been evaluated that the activities of the commission were not particularly effective. The social integration model of social capital may be helpful in explaining the failure. I suspect that the leaders of each party need to have the intention to commit to social partnership plus the ability necessary to make compromises without losing the support of their group members.

2-2-6. Social Capital in Korea

Democratisation and Economic Crisis

Little academic work has been conducted on social capital in Korea for several reasons. Traditionally, there have been three forms of social network or social-

ladders which aid success in business or social life: *hyeolyeon* in Korean or blood kinship, *hakgyeon* or school alumni, and *jeeyeon* or networks of people sharing a geographical background or hometown. The concept of social capital, in particular, in Bourdieu's definition, may include those social resources, but Korean people tend to look on factors which may deepen social fragmentation. In politics, the *jeeyeon* or geographical background has been a dominant factor in electoral geography, which implies that the likelihood of social capital has not been used for political integration at large in Korean society.

Jang (2002) has suggested that Korea underwent a "downward cycle" in terms of social capital during democratic transition and consolidation. According to him, the case study of Korea does not show a positive correlation between interpersonal trust and political involvement, contrary to the cases of Western countries in which, the more people become involved in civic associations and political activities, the more they will trust fellow citizens and have confidence in the system of government. Given the unusually high social mobility in Korean society, people tend to regard disparity in income as an outcome of external factors, such as irrational policies or unfair market, rather than as that of internal ones, such as lack of skill or human capital, leading to low interpersonal trust regardless of class. In other words, people on lower incomes tend to compare their own economic situation with those on higher incomes, creating antagonism toward rich persons, without considering that they haven't invested in developing human capital to the same extent. As in the advanced countries education is the most powerful factor in explaining the level of social and political engagement by Koreans, but in contrast affluent, highly-educated

Koreans are more likely to distrust political institutions. Jang, however, did not develop his argument to the point that highly-educated persons are more likely to be critical citizens (Norris 1999) than others.

Contrary to the approach in which Jang asserts the downward trend of social capital in Korea, Park (2003) has argued that social capital played a significant role by maintaining social cohesion and integration during the very trying times of structural reform, expediting the institutionalization of new socioeconomic policies and systems. In 1997 when the country's foreign currency reserves were nearly exhausted, compelling the country to request a bail-out by the International Monetary Fund (IMF), many Koreans participated in a social movement through which participants gave the gold in their safes to a nationwide fundraising effort. Park sought to describe the solidaristic characteristics Korean people have maintained throughout their history, indicating that a considerable reserve of social capital persisted.

> *"This character was revealed in a form of, so called, "Gold Gathering Movement" in the 1997 crisis. In January 1998, the movement was initiated by a civil organization and then received nationwide support, particularly from civil and religious organizations. More than 3.5 million people, around 30 percent of total family numbers, participated in the movement by bringing out gold they had kept at home. Within several months, 227 tons of gold worth more than $2.2 billion was gathered. It helped replenish foreign exchange reserves at stake and certainly played the role as an ignition stone for the recovery of the economy."*

There is no reason to oppose the main point of Park's assertion, but his thesis may lack empirical evidence to support his argument in terms of social capital framework. In addition, it may be unclear that such collective action in the national crisis can be explained by social capital.

Affective Linkage

More serious discussion about social capital in Korean society was raised by Professor Lew (2001): he attempted to relate social capital to the impact of Confucianism on Korean society and the issue of post-industrial society. In fact, Lew (2001) challenged the assertion that Korea needed to overcome its propensity for closed affective relationship to make network organisations play a positive role as the model of a future-oriented organisation[20], unlike bureaucratic organisations that have been regarded for a century as the model of effective control and management for corporations as Weber suggested. This assertion was made in a newspaper article (Han, Joong-Ang Daily, 27 March 2000), in which it was argued that bureaucratic organizations have been increasingly replaced by network organizations partly because bureaucracy cannot adapt to rapidly changing markets. The article then also argued that network organizations are often deeply encroached upon by traditional affective relationships. In the case of Silicon Valley, linkages between companies based on affective relationships operate on top of a framework of fair market competition, but have never lost their open character. The article argued that in Korean society private affective linkages become substituted for public organizations and widely produce all kinds of inefficiencies and inequities,

thereby amplifying social distrust and conflict.

Opposing that diagnosis of Korean society, Lew (2001) claimed that affective linkages based on personal relationships can become a useful resource in the coming post-modern society where atomized individuals are supposed to find meaningful relations with each other and strive to belong to a community. Lew attempted to categorise social groups that exist in the non-profit and non-governmental sectors within the context of Korean society. He assumed that there are two pathways to form social networks: voluntary participation and affective linkage. In general, voluntary association allows individuals to join and withdraw upon at will, in most cases, for the purpose of sharing interest, ideology or concern, as in the case of clubs and citizens' group. By contrast, networks of affective linkages tend to reflect communitarian concerns between members who share specific experiences obtained through their life process rather than individual choice, as shown in the case of clan organizations, regional associations, and alumni associations which are formed on the basis of affective linkages such as kinship, home town, or school ties. There is another dimension by which social groups are categorised: whether members seek for private or public good. However, it may be difficult to clarify the overall aims of a group in term of public or private good, as he acknowledged[21]. In particular, social networks based on affective linkages are likely to be unclear whether they are aimed at private or public good as shown in the following table.

Table II-1 Classification of Groups

	Aim of Activities	
	Private Good	Public Good

Membership basis	Voluntary	**Type A** (Clubs)	**Type B** (Citizens' Groups)
	Non-voluntary (Affective Linkage)	**Type C** (Kinship, Regional, Alumni Association)	

Source: Lew (2001)

Although Lew did not carry out systematic empirical analysis, he argued that experience and knowledge accumulated over a long period of time made possible a rough comparison. According to him, a larger proportion of Korean people belong to C-type groups. That is, many Korean people tend to form social groups based on affective linkages, such as kinship, regionalism or school ties. On the other hand, he diagnosed that the formation and activities of the B-type group, based on civility, have still not reached satisfactory levels and making specific predictions about the A-type group is not easy.

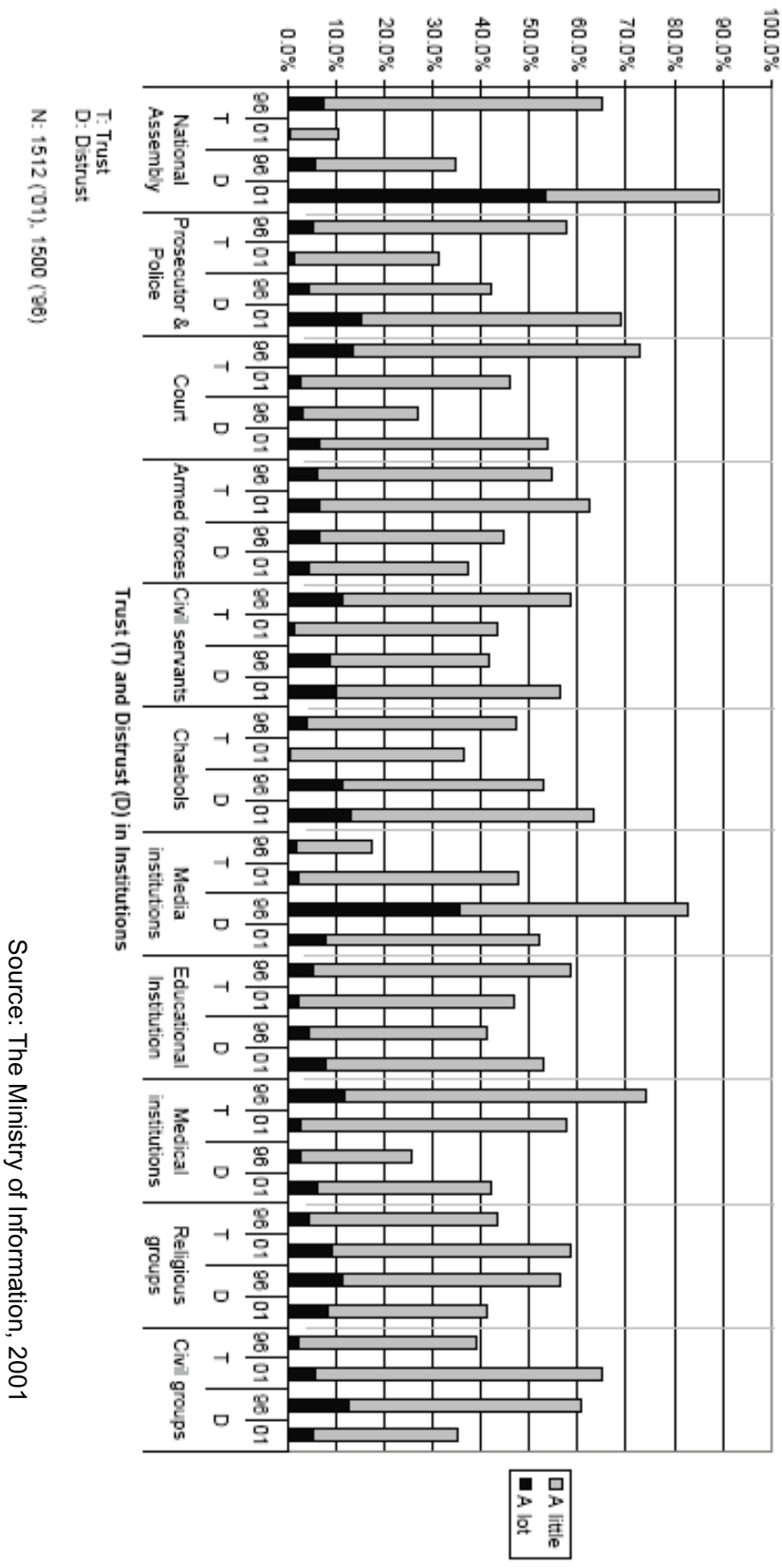
Lew draws attention to the question of how to evaluate Korean society with the widespread presence of C-type groups based on affective linkages, from the perspective of social capital. In retrospect, the works of Coleman, Putnam, and Bourdieu concluded that social capital does not necessarily have to take the form of voluntary association. This is because social capital is a question of *the closed network* which can produce "generalized reciprocity" supplying public goods among members. In this sense, the affective linkage groups in Korean society furnish a source of extremely strong social capital. Lew concluded that as a consequence of the existence of affective linkage groups, it would not seem inappropriate to appraise Korea as a "Heaven of Social Capital."

Trust in Social Institutions

In relation to the political process, however, social capital may be attributed more to the level of trust that individual citizens have towards government rather than to affective linkages. The Korean Ministry of Information has conducted a nation-wide survey every four years on Korean people's attitudes and value systems, the data of which is publically available. Most items and question wordings in the questionnaire have been maintained in the surveys, making it easy to compare changes across each wave of the survey. The survey includes two sets of questions asking about the level of trust in social and political institutions and the level of satisfaction with public services. I compared the level of trust in social and political institutions between 1996 and 2001, as shown in Chart 11.1 below[22]. In the survey in 1996, the proportion of respondents saying that they trusted the National Assembly, prosecutor and police, courts, educational institutes, civil servants and medical institutes is larger than that of respondents saying they did not. A larger proportion of respondents distrust the media and religious organisations. In particular, it may be noteworthy that many people distrusted citizen's movement groups. The 2001 data shows significant changes in citizen's attitudes toward social and political institutions: firstly, the citizen's movement groups which had been distrusted became much more trusted, which signifies changes in people's evaluation of roles and performance of the citizen's movement groups; secondly, Koreans seemed more trusting of the armed forces, which may reflect their confidence in democratic consolidation free from the fear of another military coup and more trustful psychological reliance on the armed forces for national defence; thirdly, distrust in the media decreased by a great margin, which implies public recognition that the media became more independent of

political power since the opposition party took office in 1998.

Chart II-1 Trust in Institutions in Korea



Source: The Ministry of Information, 2001

I examined the correlations between the level of people's satisfaction with public services and the level of their trust in social and political institutions. The result shows that there is significant relationship between the two variables as shown in Chart II-1 while Table II-2 demonstrates that those who trust in armed forces, police, national assembly, court and civil servants are more satisfied with the services of medical institutes, courts, security authorities, public organisations and tax office.

Table II-2 Correlations between Satisfaction with Public Services and Trust in Institutions

	Armed forces	Media	Police	National Assembly & political parties	citizen's movement groups	Court	Civil servants
Subway	.065*	.012	.025	-.039	.043	-.002	.014
City bus Service	.151**	.103**	.182	.122	.133**	.138**	.165**
Fire Service	.128**	-.006	.028	-.080	.148**	.130**	.089**
Medical service	.162**	.188**	.258**	.158**	.088**	.270**	.228**
Court	.223**	.219**	.345**	.201**	.119**	.522**	.220**
Security Service	.213**	.200**	.381**	.176**	.112**	.251**	.294**
Railway Service	.177**	.070*	.103	-.047	.181**	.147**	.119**
Post Office	.100**	.023	.062	-.062	.148**	.115**	.115**
Airway service	.100**	.050	.097	-.040	.080	.149**	.102**
Public agency	.187**	.132**	.202**	.099**	.129**	.200**	.406**
Tax Office	.168**	.163**	.262**	.220**	.155**	.272**	.360**
Communication	.203**	.097	.125**	-.028	.171**	.187**	.159**

** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).
Source: The Ministry of Information, 2001

The dynamic nature of political support and trust can be approached by recognising the multi-dimensional character of political community, democracy as an ideal form of government, and public perceptions of the varied performance of the actual regime (Klingemann 1999). Table II-2 implies that the level of satisfaction with the services of public institutions and agencies is highly correlated with trust in the institution concerned. For example, correlation between trust in the law courts and satisfaction with the service of the courts is high (r=0.522). In addition, the levels of satisfaction with the services of public agencies and tax office have relatively high relationship with trust in civil servants (r=0.406, r=0.360).

The data in the table indicates that it is possible to build up the level of trust in government by satisfying citizens with the quality of public service. Improving the performance of governmental agencies may improve the level of citizens' trust in government and consequently overall social capital. When we treat trust as a key element of social capital, trust may be not an endogenous given but can be changed by the effort of governments. If greater efficiency and transparency through electronic governments have positively influenced citizens' trust in government, the Internet can be said to contribute to the creation of social capital.

2-3. The Internet, Social Capital and Political Participation

In the first section of this chapter, I provided a theoretical background of social capital to guide my research, with focus on its *functions* in the political process. In connection with the theoretical background, I would like to review some important articles about Internet influence on social capital on the premise that social capital matters in the political process and also examine some issues relating to political participation. What I am concerned with are the approaches taken by other researchers to examine the impact of the Internet on society. In reviewing these approaches, I intend to focus on those articles most relevant to my study, instead of an extensive review. The key question is firstly, whether or not the Internet influences social capital? If so, what kind of impact does it have on social capital, positive or negative? Is the scope of its impact comprehensive enough to change our lives? Or is it just supplemental to the existing pattern of our lives? Secondly, I am concerned with the mechanism or paths through which the Internet affects social capital.

2-3-1. Analytical Frameworks

Measuring social capital seems to be controversial in social science. Pippa Norris pointed out in relation to the measurement of the social capital variable(2000), that the problem comes from measuring associational networks involving two different dimensions in a single factor. She explains that “associational membership represents a proxy indicator both for the structural features of social capital (social networks) and for the cultural norms (of trust and cooperation).” She argues that it may not be clear whether all voluntary organizations are equally effective at generating the cultural norms of reciprocal

cooperation, tolerance and social trust, or even the bonds of friendship and collegiality, that are at the heart of social capital theory. Much of the early work regarded the membership of formal associations as proxy indicators of social networks, yet it is possible that informal linkages, such as extended family ties, may prove richer and denser ways to generate the social norms of mutual trust, reciprocity and tolerance. She comments further, however that certain networks can bind groups together in ways that are negative for society as a whole, reinforcing the practices of nepotism, ethnic hatred, and sectarianism. Tolerance and trust of members within the community does not necessarily mean tolerance of outsiders, sometimes just the opposite.

As I indicated in the introduction, I am interested in identifying explanatory factors at the individual level, which influence the sources of social capital, and I am also curious to confirm whether the factors and the sources of social capital have any relationship with political participation. Among many works on the similar subject and approach, two groups of studies seem to be comparable to my research: the one is that undertaken by Gibson and her colleagues', developing a model to investigate the relationship between Internet connectedness and social capital, and comparing different trends among four countries in *Social Capital, Internet Connectedness, and Political Participation: Four Countries* Study (2000); and the other is the work by Shah and his colleagues' on identifying factors which affect the creation of social capital in *Connecting and Disconnecting with Civic Life: Patterns of Internet Use and the Production of Social Capital (2001)*.

The model of Gibson and her colleagues' involves measuring three variables:

political participation, Internet connectedness and social capital. To measure political participation, several modes of political participation are set out, including signing petitions, writing to government representatives or working for a political party, activities of which respondents are asked to report in terms of frequency on a 0-8 scale. Internet connectedness was measured by asking respondents to report how long they spend online on a six point Likert scale. In designing a research model, it is important how to deal with the major target variable, social capital in the case of my research. Gibson and her colleagues proposed a composite variable for social capital, with three elements: civic engagement, social connectedness, and community support. This way of composing the variable of social capital can be compared with that of Shah and his colleagues, which is to measure civic engagement, interpersonal trust, and contentment.

Gibson and her colleagues used data from the web-based survey in the Survey 2000 data collection in the fall of 1998 on the home page of the National Geographic Society. They categorised Internet users in terms of attitudes toward the Internet and uses of the Internet into three groups: socialisers/community builders, utilitarians, and game players/recreational users. Shah and his colleagues also set up four types of Internet usages: product consumption, information exchanges, social recreation and financial management. In addition, they divided samples into three sub-groups in terms of their age: Generation X, who were born later than 1965; Baby Boomer, who were born between the year 1946 and 1964; and Civic Generation, who were born in 1945 or earlier.

In the model of Gibson and her colleagues, three types of Internet user groups constitute exogenous variables which are hypothesised to influence two dependant variables: social capital and political capital. They found no significant negative effect of connectedness on social capital but differing degrees of positive effect of connectedness on both social capital and political participation, varying by type of Internet user and by country. Shah and his colleagues concluded that informational uses of the Internet are positively related to individual differences in the production of social capital whereas social-recreational uses are negatively related to these civic indicators.

2-3-2. Approaches to Internet Impact

Direction of Debates

Wellman et al (2001) disentangled Putnam's theory of social capital into two forms of capital: *network capital*, which implies relations with friends, neighbours, relatives, and workmates that significantly provide companionship, emotional aid, goods and services, information, and a sense of belonging; and *participatory capital,* which means involvement in politics and voluntary organizations that afford opportunities for people to bond, create joint accomplishments, and aggregate and articulate their demands and desires. Against Putnam's "bowling alone" theory, they ask; "what if Putnam is only measuring old forms of community and participation, while new forms of communication and organization underneath his radar are connecting people?" (Wellman, Haase et al. 2001:438). They suggested that "the observed decline has not led to social isolation, but to community becoming embedded in social

networks rather than groups, and a movement of community relationships from easily observed public spaces to less-accessible private homes" (Wellman, Haase et al. 2001:438).

> If people are tucked away in their homes rather than conversing in cafes, then perhaps they are going online: chatting online one-to-one; exchanging email in duets or small groups; or schmoozing, ranting, and organizing in discussion groups such as "list serves" or "newsgroups" (Wellman, Haase et al. 2001:439).

They postulated three approaches to the impact of the internet and social capital: increase, decrease, and supplementation. Firstly, some analysts have argued that the Internet increases social capital by creating new forms of online interaction and enhancing offline relationships, restoring community. In this view, the Internet not only affords opportunities to contact friends and kin at low cost, but it also enhances face-to-face and telephone communication as network members. Other theorists argue that the Internet decreases social capital by diverting people from 'true' community, in which complex offline ties foster friendships and provide intangible resources such as emotional support, as well as tangible material aid. According to this view, the Internet may compete for time with other productive activities within an inelastic 24 hour day, make users pay less attention to their physical and social surroundings, or may be a stressor that depresses and alienates people from interaction. Thirdly, to some, the Internet is neither revolutionary nor evolutionary, but has a supplementary role in shaping social trends, for example, providing an additional means of communication to telephone, face-to-face contact, and

traditional mail.

Nie and Erbring (2000), based on their findings from a survey under Stanford University's Institute for the Quantitative Study of Society in 2000, concluded that the more time people spend using the Internet, the more they lose contact with their social environment, the more they turn their back on the traditional media, like newspapers, and the more time they spend working at home and at the office. Robert Kraut et al (1998) argued that the Internet is an antisocial medium that generates feelings of isolation and even depression among those who use it., mainly because it took up valuable time that would otherwise be spent in real-life interactions with family and friends.

On the contrary, from longitudinal data from the year 1998 to 2003 collected from a population of Swiss citizens, Franzen (2003) examined the determinants of the adoption of the Internet and the consequences for respondents' personal networks as well as the time they spent socialising with their network. He found that Internet use is not associated with a reduction in people's networks or with the time they spent socialising with friends. Instead the findings suggest that the time users devote to the Internet is taken away from the time they spend on watching television.

> Nie and Erbring's (2000) data were drawn from individual responses to national random samples. Other scholars used this same data to try and isolate the effects on political engagement of increased quantity of political information provided by the Internet (e.g.Bimber 2001). But there is more to the Internet than simply increasing the amount of

political information available to citizens (Chadwick 2006). Nie and Erbring's view, in which the Internet displaces time that would otherwise be used for community-building activities, fails to recognize that many of the activities on which we spend time online are positively related to organizing and extending our community ties (Gershunuy 2003, quoted in Chadwick 2006). In a panel survey, Kraut and his colleague revisited a sample of internet surfers and found that the Internet was actually proving to be socially and psychologically beneficial (Kraut, Kiesler et al. 2002). Shah, Kwon el al(2001) reported that those who seek out political information are more likely to have high levels of social capital, whereas those who primarily use the Internet for social recreation are likely to have lower levels. Shah, McLeod et al (2001) argued that using the Internet to exchange political information creates higher levels of trust than using traditional print and broadcast news media. Katz, Rice et al's findings support a more positive interpretation of the Internet's impact, at least in terms of interpersonal communication, where Internet use was also associated with greater levels of telephone use and social interaction (Katz, Rice et al. 2001). Haase et al (2002) found that online social contact supplements the frequency of face-to-face and telephone such that people can and do use the Internet for social-capital-building activities. Whether the community computer network is a new kind of voluntary association or an efficient way of extending traditional associations to new audiences, network users are engaging in communication with their community members.

Pre-existing Factors

The relationship between online and offline social ties is studied in seven Los Angeles ethnically marked residential areas (Matei and Ball-Rokeach 2001). Contrary to existing conceptions, Matei and Ball-Rokeach (2001) advance a non-zero sum approach to the two social ties: a higher level of belonging to real communities translates into a higher propensity for interaction online. This approach is informed by a social shaping of technology perspective, which proposes that strong anchoring to offline social and cultural groups links cyberspace to people's local communities. Results of a logistic regression analysis indicate that the chances of making a friend online increase by 7% for each belonging index unit and by 32% for each neighbour known well enough to talk to about a personal problem. Even though ethnic differences are less pronounced than expected, Asian respondents, particularly those of Korean descent, are more likely to form online ties than mainstream white respondents. Focus group data suggested that online ties are established with people of the same ethnicity.

Based on the case of the Blacksburg Electronic Village (BEV) [23], which is the most researched case in the world for the impact of the Internet on social networks, Kavanaugh and Patterson (2001) suggested that there is no trend toward an increase in community involvement or attachment except in a subset of the population that scores high on measures of pre-existing community involvement.

Such claims may be echoed by Putnam (1995:177) who argued that such

initiatives are an outcome of communities with already high levels of social capital, community involvement, and community attachment: “social capital may turn out to be a prerequisite for, rather than a consequence of, effective computer-mediated communication”. These results of Kavanaugh and Patterson may justify Putnam’s claims about the relationship between the Internet and the processes of social capital. Community computer networks are more likely to succeed in communities with already high levels of social capital.

However, there is another approach to explaining the BEV case. The Internet and associated community computer networks may capitalize on existing social networks while at the same time bringing new participants to the dialogue. In fact, it may be easier for people to engage in community life through the Internet than to attend a face-to-face meeting or event. Kohut (1999) suggested that early adopters of the Internet tend to be active in civic life and community communication networks. The media, including the Internet, contribute to the political communication process, according to Norris (2000), by a virtuous circle of ratcheting up and reinforcing the participation of interested individuals. The longer people use the community computer network and the Internet, the greater they report feeling involved in the local community, feeling connected to people like them, and feeling involved with issues that interest them.

Wellman et al carried out a large scale survey[24] through the website of the National Geographic Society “Survey 2000”, requesting visitors to complete forms. They found that Internet use supplements both *network capital* and *participatory capital* by extending existing levels of face-to-face and telephone contact. The more people are on the Internet, and the more they are involved in

online organizational and political activities, the more they are involved in offline organizational and political activities. People already participating offline will use the Internet to augment and extend their participation. People already participating online will get more involved in-person with organizations and politics. What attracted analysts attention was that using the Internet is related differently to a *general sense of community* and a *sense of online community*: on the one hand, there was no association between use of the Internet and either a general sense of community or feelings of alienation; on the other hand, frequent use of the Internet was associated with positive feeling of community online. The researchers set out two forms of activities: *social* activities such as email and chatting that promote interactions; and *asocial* activities such as web-surfing and reading alone. And, they concluded: when the Internet engages people primarily in asocial activities, it may turn them away from community involvement by immersing them; by contrast, when people use the Internet to communicate and coordinate with friends, relatives, and organizations, then it becomes a tool for building and maintaining social capital.

Virtual Community

Online social networks are webs of relationships that grow from computer-mediated discussions (2000). The webs grow from conversations among people who share a common affinity[25] and who differ in other ways[26]. When the people are distributed across time and space, then these conversations need to take place online, over an intranet or private internet forum. Within a company, a well-developed online social network can enhance the company's collective knowledge and sharpen its ability to act on what people know in time

to be effective. We have long recognized that this kind of network is critical to the flow of thought and mind running underneath formal organisations.

Some of the online social networks may evolve into virtual communities, which refers to “groups of people who interact primarily through computer-mediated communication and who identify with and have developed feelings of belonging and attachment to each other” (Blanchard 2004: 55). These feelings may be a critical factor, which distinguishes virtual community from just virtual groups or online social networks. According to Rheingold (Rheingold 1993) "virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (p.5).

Such a definition may be rejected from the perspective of a traditional notion of community. Arguing against Rheingold, Weinreich (1997) asserted that the idea of virtual community must be wrong in that community is a collective of kinship networks which share a common geographic territory, a common history, and a shared value system, usually rooted in a common religion. The controversy seems to derive from whether the factor of physical space is critical or not. Some other analysts have proposed a more flexible approach:

> “*The distribution of people in dispersed social systems is not only spatial but (also) mental. Some people are in a planetary community; some are in a national community; still others are in a community bounded by their limited interests. The bodies of people might be in one spatial area, but not their social worlds. The concept of locale has little meaning in this*

> *context. The concept of communality was once proposed to refer to these locale-independent relationships*." (Bernard 1973, Quoted in Jones 1997)

In the discussion of computer-mediated communication, the factor of physical space may not be critical to defining virtual community. Other factors, such as common values or psychological attachment, seem to be more relevant to understanding virtual community.

In practical usage, however, we need to distinguish two different types of virtual community in terms of the factor of place. Blanchard and Horan (1998) suggested distinguishing between *physically based virtual community* and *virtual communities of interest*. The first type of virtual community may be established to add electronic resources to the more traditional sense of physically based community. I myself have more opportunities to get together with other members of my alumni association or academic fora in the websites which are designed to support those off-line associations and fora. The second type of virtual community is geographically dispersed with members participating due to their shared interests in a topic and not their shared physical location. In recent years countless websites provide Internet users with electronic bulletin boards in which people with shared interests are enabled to get together easily.

Identifying some virtual communities on the basis of physical place implies that the factor of physical location is not critical to defining virtual community but it is meaningful to relating the two types of community to social capital. We may

hypothesise that whilst *physically based virtual community* tends to strengthen bonding social capital, *virtual community of interest* may lead to bridging social capital.

Blanchard and Horan suggested that dispersed virtual communities and physically based communities may have potential to increase social capital, but physically based communities might be more likely to increase civic engagement because these communities already are associated with civic centres. This may be valid if the range of civic engagement is confined to the face-to-face context, but recently there have appeared other forms of civic engagement without the basis of face-to-face contact, such as cyber collective action.

People participate in online communities of interest that have no geographical boundaries. In addition, the Internet is a tool for those who are involved with local groups. More than one in four American Internet users have used the Internet to contact or get information about local groups (Chadwick 2006). Further, many people reported that through online communities they established contact with individuals of different racial, ethnic, and economic backgrounds or a different generation whom they otherwise would not have met.

2-4. Proposal of Definition in the Online Context

With all the different approaches, in fact, we may need to concentrate on individual behaviour and attitudes in Internet use at the micro-level simply because individual adoption of the medium may be a starting point from which the Internet can exert its influence on a society. Echoing some literature arguing

that the amount of social capital is affected by the properties of interpersonal relationship (e.g. Shah 1998) and the location of social networks (e.g. Burt 2000), I would assume that when the Internet constitutes a part of an individual's communication structure existing social capital may change and causes variations in the modes of the individual's interaction with others. From the perspective of both communitarians and pluralists, the individuals living in a democratic society do not regard themselves only as those who defend and promote their private interests but also as a member of given society who embark on a common way of life. Social network analysis conceives of social structure as the patterned organisation of those interpersonal relationships: if the Internet affects the mode of interpersonal communication and relationship, and if it causes any change in the patterns of those relationships, it can be concluded that the Internet has impact on social capital (Wellman 2001).

In the course of surfing or emailing in their daily life, some individual citizens may create, consciously or unconsciously, social capital and invest a part of or all the potential amount of social capital into pursuing their common goals.

In this context, I would like to propose a definition of social capital, which may fit Internet research and pay more attention to its function in political process:

> *Social capital refers to those resources in a form of individuals' readiness and willingness, acquired in the course of their use of the Internet, based on civic knowledge of public issues, dense or loose interpersonal networks, and trust in virtual community, which in certain situations induces them to*

contribute to collective effort to address their interests and resolve common problems.

This definition is derived from the classical theories of social capital but states more clearly the nature and functions of the resource, specifying a set of conditions under which it is likely to be produced, especially, in the situation of Internet use.

Although I would confine the scope of my research to the individual level of social capital, it seems that the definition can be extended up to the level of society at large, with which social capital may be referred to as all forms of social resources to be mobilized for collective actions, the resources of which include institutional and voluntary devices to isolate vicious elements, such as computer viruses, hacking, or deliberate dissemination of false information, which seek to distort and undermine communicative and cooperative networks. In addition, I would contend that openness and transparency of government may have substantial influence on social capital at the level of society (Maloney, Smith et al. 2000). In fact, the two elements constitute the key part of electronic governance and together consequently cause changes in the political opportunity structure. Theorists who argue for the concept of political capital, which may have more political relevancy in explaining political participation than the classical concept of social capital, may well regard such factors as the political opportunity structure as key factors for the production of the capital. I would not use explicitly the term of political capital but consider the introduction of some variables bearing analogy with political capital. Do people recognize such changes in government organizations as openness and transparency?

How much do they utilize the openness and transparency? How do they evaluate the consequences of such changes? Openness and transparency change the political opportunity structure from the perspective of political movement theorists, and should therefore be taken into consideration as key variables for approaches to social or political capital at the societal level.

However, recognition, practice and assessment of the political opportunities may be subject to the attitudinal and behavioural variables at the level of individual. Given the claims that social capital alone cannot explain political participation (Newton 1999; Norris 1999), such supplementary attitudinal and behavioural factors may help variables of on-line social capital predict individual's political engagement , in whatever forms they may be, whether seeking out political information, making contact with political leaders, making requests for or complaints about public services or calling for collective action. These may be representative forms of engagement in new political opportunities which Internet technologies provide the members of political communities. They also serve as indicators showing how much Internet users are engaging in political processes.

2-5. Summary and Conclusion

This chapter designated the scope of research by specifying an approach to Internet politics and proposing an operational definition of social capital. I would confine the usage of Internet politics to the use of the medium to influence the political process. In particular, it is necessary to note that the approach will shed light on different aspects of the political process: campaigns for greater citizen control over government from the viewpoint of plebiscitarians; community-building from the viewpoint of communitarians; and interest articulation or aggregation of diversified issue groups from the view of pluralists. My model can be said to incorporate all the three approaches by adopting the concept of social capital as a kind of catalyst which utilises the positive potential of the Internet into making political process work democratically and efficiently. That is why I considered in detail the functions of social capital through five analytical models; the perfect competition model, the rule compliance model, the community-oriented model, the organisation model, and the social integration model.

Among the functions of social capital, the perfect competition model and the organisational model may be applied to the plebiscitary approach, the community-oriented model and the rule compliance model are closely related to the communitarian approach, and the social integration model may be said to be related to the pluralistic approach. Literature review and data analysis of Korean society suggest that Korean people have built the stock of social capital based on deep-rooted affective linkages and that they show trust in some governmental agencies that satisfy their needs; the data also show that citizen

movement organisations have taken an increasingly significant role as intermediaries between civil society and government.

The literature review on the impact of the Internet on social capital and society reveals that different analysts look on different sides of its social influence. Internet communication tends to invigorate off-line relationships into diverse and vibrant online social networks. In addition, it facilitates people joining virtual communities as groups of people interacting primarily through CMC and who share identity, a feeling of belonging or attachment, with each other. In understanding the course of transforming Internet driven social network into social capital, I felt it necessary to develop a more contextual definition of social capital which reflects the focus of my research, better fitted to the problems for analysis.

The definition proposed in this chapter results from prolonged deliberation about the *substance* of social capital at least in the online situation; concluding that it amounted to the individual Internet users' *readiness* and *willingness*. Some elements of social capital Putnam suggested, such as trust in society, social network, and norms of reciprocity, may be prerequisites for individuals' readiness for cooperation and collective action for solving social problem. Without individual willingness to sacrifice time and money for such actions, no social capital can accrue for the benefit of the wider society, even if there exist trust, norms and social network.

In the proposed definition, the element of knowledge, network, and virtual community are exemplar elements for politically relevant social capital, which

set up the subject of discussion in Chapter 3. They provide the directions of research toward the role of social capital in making the political process work better in the era of the Internet. Social capital, it is postulated, makes people more knowledgeable, encourages them to be widely and deeply networked, and enables them to nurture trustworthy virtual communities.

Chapter III Theoretical Foundation of the Research Model

3-1. Overview

This chapter reviews all the key theories I would like to employ in designing the research model. As the goal of my research is to analyse Internet users' behaviours in terms of the political implications such 'usages' bear, each of the theories employed is expected to take an unique role in each part of the model. Most of them produce factors or variables which are critical to explaining the creation of social capital and political participation in online forms.

My research does not aim to measure the stock of social capital. Rather, I am interested in analysing Internet users' behaviours on the sources of social capital and identifying factors explaining such behaviours. I do not make any attempt to cover all the forms of political participations. Instead, I would confine the scope of political opportunities opened to Internet users and make an effort to explain their behaviours and attitudes regarding these opportunities.

The theories reviewed in this chapter may not be directly related to social capital itself or to changes in the political opportunity structure. However, all of them are instrumental in seeking for significant evidence to show who are using the Internet in ways to create social capital and what modes of Internet use are positively related to engagement in online forms of political opportunity.

3-2. the Scope of the Research

In general, the Internet is said to help people acquire information, communicate with others, and participate in virtual communities (Shah and Kwak 2001). The three aspects of the medium leave a variety of modes of Internet use to individuals' options: they may create social capital in the course of using the Internet or they may destroy it. People's general use of the Internet may determine a set of patterns in which they acquire information, communicate with others and join virtual communities.

I assume that these patterns extend to modes of political use of the Internet: how do users react to emerging political opportunities? The Internet helps people gain easy access to political information, communicate efficiently with government officials or politicians, and interact with other members of virtual communities or mobilise for collective action. I will draw attention to the relationships between people's daily use of the Internet, as the sources of social capital, and their political use of the medium, as a form of political participation. If the evidence shows a significant relationship, we can infer that Internet users who build substantial social capital are likely to engage in online political opportunity. In addition, we may venture the conclusion that the Internet contributes to making political process more deliberative and more participatory than other media.

Prior to describing my research model, it is necessary to reiterate the goals of this research. As the main title, *Political Anatomy of Internet Users in Korea*, suggests, the core tasks will be to identify key factors explaining Internet users'

behaviours and attitudes, some of which I would like to draw attention from the perspective of social capital theory, and relate the factors to the quality of their engagement in online political opportunities. In this line of examination, there are three components of the research framework: (a) to clarify the modes of Internet usage associated with favourable conditions for the creation of social capital; (b) to confirm the modes of engagement in online political opportunities; and (c) to identify factors effectively explaining those modes. These components correspond to the political anatomy of Internet users.

Firstly, this model does not suggest any listed elements of social capital nor measure its amount. Based on my understanding of social capital as “social resources in a form of individuals’ readiness and willingness, acquired in the course of their use of the Internet, based on civic knowledge of public issues, dense or loose interpersonal networks, trust in virtual community, which in certain situations may induce them into collective effort to address their interests and resolve common problems”, it is possible to establish a set of conditions under which social capital may be created in the context of online community. The condition is composed of the patterns of Internet use which are believed to be productive in the creation of social capital. The function of the model is to tap just the *probability* of increasing or decreasing social capital, which depends on people’s behaviours and attitudes on the sources of social capital. In other words, the model assumes that the general pattern of individuals’ Internet usage determines whether their use creates social capital and to what extent their online activities enhance the level of social capital.

Secondly, the model puts the focus on people’s political use of the Internet. It is

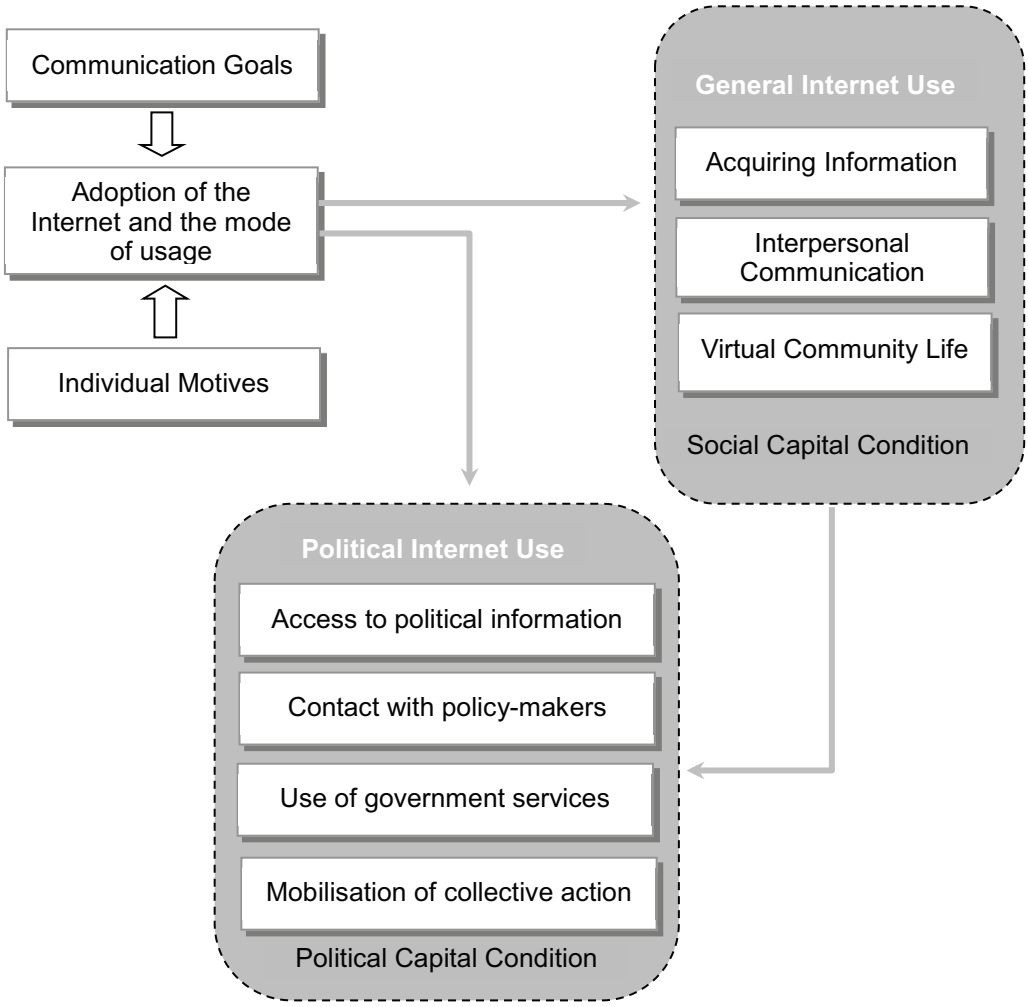
assumed that the pattern of individuals' political Internet use may be subject to their general use of the Internet. In fact, there may be possibility that people's political use of the Internet may strengthen a certain type of general Internet use. However, the model confines the direction from the general use to the political use of the medium. The focus will be put on identifying who are active and positive in online forms of political participation. The Internet facilitates acquisition of political information contact with policy-makers, online delivery of public services and mobilisation for collective action. I will see if social capital creating *conditions* are associated with people's active utilisation and positive evaluation of political opportunity. From the perspective of electronic democracy, this thesis draws attention to both the *social phenomenon* that the Internet has expanded political opportunities and the *behavioural diversity* that different individuals react to the changes in political process in different ways. Here, the term *political opportunity* can be understood as an identifiable possibility to attain the public and political goals of an individual or groups of citizens, through some form of interaction with government or political parties.

Lastly, answering the question, 'why some Internet users are *active on social capital and political opportunities and others are not?'* may be possible by the examining their goals and motives for Internet use. In fact, most existing articles and reports have sought the answer from the characteristics of Internet usage, such as years of using the Internet or intensity of use[27]. However, my observations suggest that examining such variables does not produce convincing explanation for individuals' behaviours on Internet use.

With the three points in mind pertaining to the scope of study, the structure of

the research model can be described in following Figure 3-1: the model starts with the question, why do people use the Internet, which is about individual motives and those modes by which she or he adopts the medium for information and communication; individual's general usage of the medium, patterned and repeated habitual use of the Internet in their daily lives, which may consequently cause positive or negative changes in the stock of social capital. The model assumes that people's online political participation may be affected both by individual motives for Internet usage and their general usage of the medium in daily life.

Chart III-1 Conceptualised Relationship of Internet Effects on Social and Political Life



3-3. Explanatory Factors

Different Internet users employ the medium in different ways. For some individuals, the Internet may promote civic engagement because it allows them to obtain information and knowledge, maintain social networks, and coordinate collective action to address common interests (John 1994; Bimber 1998). Possible scenarios for the Internet's effect on society, range from building social capital (e.g. Rheingold 1993) to destroying it (e.g. Kraut, Lundmark et al. 1998). What makes these differences? What factors lead to Internet users' diverse usages, resulting in different consequences for social capital?

Research on media uses and gratifications may provide useful insights into the relationships between different patterns of media use and the production of social capital. Work in this area has tried to answer the question of why individuals choose to attend to particular media channels or types of content and what gratifications they seek by adopting the media and content (Zillman 1985; Shah and Kwak 2001). The ultimate goal of this approach is to identify motives by which people actively choose media as well as the mode of media usage. A firm understanding of individual motivation may also help the media researcher to better understand media effects (Angleman 2000).

Even though there seems to have been various formulations of the approach under the label of the use and gratification theory, a common factor is the concept of the '*active*' media user. McLeod and Becker (1981) presented three points many theorists have commonly suggested as a notion of 'active' media users: firstly, media behaviour is *utilitarian*, and being 'active' simply means that

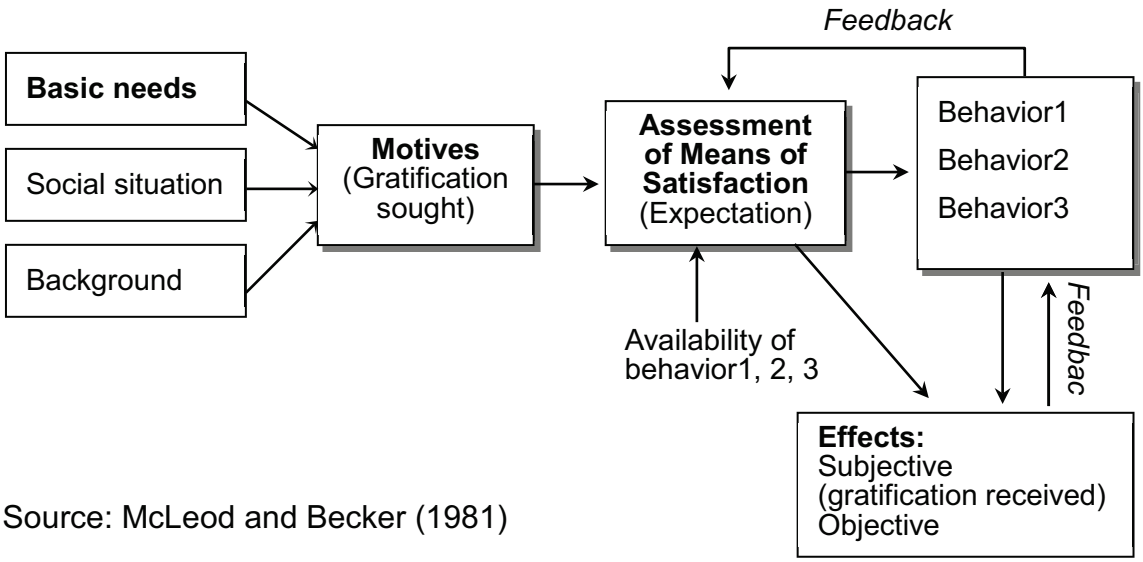
audience members use the media in a way most useful to them; secondly, media behaviour is *intentional*, directed by prior motivation; and, finally, others use the term 'active' media audience to represent *imperviousness* to influence, which they equate with the notion of an "obstinate audience". Although use and gratification theorists may share concern with the *activeness* of audience, they do not seem to define it in the same way (McLeod and Becker 1981).

In my research, as key exogenous variables, *motives* are not distinguished from internal *needs*, but the difference between the two terms should be clarified[28]: while the assessment of *needs* lies in the domain of psychology and physiology, variables of which can be difficult to measure, *motive* seems to be relatively easier to measure in that it can be regarded as less psychological and more amenable to conscious awareness, more focused and directed to some behavioural resolution, more problem oriented, and more specific to the situation (McLeod and Becker 1981). In this research project, more attention will be paid to motive, which can be defined as expressed desires for gratification in a given situation, and referred to as *gratification sought*. Gratification sought seems to originate from a person's basic needs, and shaped by social background, and current social situation. Such motives shape behaviour, but behaviour may be informed by an assessment of the various means to satisfy desires. McLeod and Becker referred to the means of satisfaction as *expectations*, as rough probabilities of satisfaction assigned by the person to various behaviours.

The assessment of means results in the selection of an option. The Internet is one of many options for personal media activities. The selection of the Internet

will be constrained by the availability of personal access skill or cost. The mode of Internet usage depends on the result of internal processes: basic needs, gratification sought, and expectation. The following figure presents the process and relationship of the factors.

Chart III-2 Use and Gratification Model



Source: McLeod and Becker (1981)

Oh et al. (2000) suggested that the uses and gratification theory is helpful in the study of CMC, including the Internet: firstly, the users of CMC tend to be *active* in that they select the medium in an effort to attain their goals effectively and adopt certain mode of usage so as to maximise the level of gratification; secondly, while competing with other media, CMC helps users achieve their goals by supplementing traditional media; thirdly, modes of Internet usage are well suited to meeting CMC users' desires; and the contents of CMC contribute directly to the degree of gratification experienced. Based on the use and gratification theory, Oh et al (2000) identified six types of Internet users through

factor analysis: communitarian, elitist, democratic activist, hobbyist, self-developer, and manipulator of mass population (Oh, Kim et al. 2000). In fact, their classification of Internet users was conducted along similar lines to Fisher *et al*'s typology of civic life in cyberspace: communitarian, democratic mobilisation, like-minded exchange, technological elitism, and manipulation and domination (Fisher, Margolis et al. 1996). Oh *et al*' proposed the type of self-developer, in addition to the five groups of Internet users identified by Fisher *et al*. Oh *et al*'s analytical framework was developed in the context of Korean society, providing relevant and contextual explanation about Korean Internet users' behaviours[29].

Let me scrutinise in more detail another typology of Internet users. Norris and Jones (1998) found four types of Internet users, labelled (a) "researchers", those who use the Internet for e-mail and investigative purposes, (b) "consumers", those who shop on-line and use the Internet as a financial and travel resource, (c) "expressive", those who discuss views or express opinions via bulletin boards, newsgroups, and chat rooms, and (d) "party animals", those who go on-line to play games and be entertained. Although based on data collected in 1995 when Internet adoption and usage levels were relatively low, their distinctions are highly suggestive of emerging patterns of new media use. For instance, those Internet users who may be called "researchers" are more politically knowledgeable than other new media users, suggesting that such types of Internet users are likely to be more informed and politically engaged citizen. On the other hand, their data show that those individuals who use the Internet mainly for entertainment and anonymous socialization may not

experience civic involvement. It seems new media could further privatise social recreation, especially since chat rooms and multiplayer games arguably supplant face-to-face social interaction and erode the sense of belonging nurtured by face-to-face relationships.

Individuals who use the Internet for communication and information acquisition, however, such as Norris and Jones's (1998) "researchers," probably encounter more information and experience more opportunities for civic engagement. Indeed, the motivated users are more likely to seek for information about social issues and public policies than the less motivated for civic life. I would contend that difference in the frequency of visiting public websites, such as websites of governments, political parties, or civil movement groups, may be a predictor of informed citizens, leading to motivated civic engagement.

Such a comparison provides the researcher with a starting point for exploring what motives are positively related to the types of Internet users who are likely to build more social capital. Explanatory variables need to show predictive power in identifying the right conditions for developing social capital. The Internet provides as many options as any combination of traditional media and communication tools can offer for the purpose of information acquisition, interpersonal communication, and community building. The strength of each motive may be an indicator to predict what types of Internet users and what mode of Internet use are favourable for the creation of social capital and positive engagement in political opportunities. In Oh *et al*'s work (2000) on the typology of Korean Internet users, for example, those Internet users who are dominated by informational or social needs are more likely than those

motivated by emotional needs, to seek information about public issues, establish new social networks, and strengthen existing social network, such users are more likely to be rich in social capital.

3-4. the Sources of Social Capital

3-4-1. Multi-dimensional Approaches

Social capital is an aggregate concept that has its basis in individual behaviour, attitudes, and predispositions (Brehm and Rahn 1997). Multiple social institutions, such as community, voluntary associations, families, or churches, nurture the habit and values that give rise to social capital.

In constructing a model of Internet impact on social capital, it may be useful to note the emphasis in some literature on portraying contemporary society as knowledge-based (Bertucci 2004). Governments around the world are increasingly aware of the importance of knowledge society for economic development and social progress, especially the synergy resulting from interaction new technologies, educated population and a networked social environment. The knowledge society produces a great variety of opportunities for those able to participate in it (Bertucci 2004). The Internet has significantly contributed to the evolution of *knowledge*-based society. In particular, governments and other political institutions are concerned with utilising the direct and interactive communication functions of the Internet, not for propaganda but as a participatory channel for large volumes of high quality knowledge. The production of politically-relevant social capital seems more likely when many people participate in the process of constructing public knowledge-bases construction, from which the participants may well derive higher levels of political interest, efficacy, or trust (Puchs, Minnite et al. 2000; Harwood and Lay 2001).

Nahapiet and Ghoshal (1998) proposed an analytical framework by which the structure of social capital sources can be established from the perspective of knowledge based community. Their approach was focused on organisational advantage, which is promoted by social capital and its consequence -- intellectual capital.

Based on their understanding of social capital that includes the actual or potential resources accessed through network interaction (Coleman 1988; Putnam 1993), they suggested that sources of social capital should be considered in terms of the *structural*, the *relational*, and the *cognitive* dimensions. Firstly, the *structural* dimension of social capital refers to the overall pattern of connections between actors. This dimension sheds light on the *network configuration* describing the pattern of linkages in terms of such measures as density, connectivity, and hierarchy, and *appropriable organisation* that may be used by actors for certain purposes at least. Secondly, the *relational* dimension of social capital borrows the concept of relational embeddedness used by Grannovetter (Granovetter 1992, Quoted in Nahapiet and Ghoshal), which describes the kind of personal relationships people have developed with each other through a history of interaction. This concept focuses on the particular relations people have, such as respect and friendship, which influence their behaviour. The third dimension of social capital, labelled as *cognitive* dimension, refers to those resources providing shared representations, interpretations and systems of meaning among parties. They emphasise the importance of this dimension in the context of intellectual capital, including shared language and social codes. They recognise that despite

analytically separated dimensions, these factors involving three criteria are closely interrelated.

The three dimensions of social capital sources will be connected with the three main functions of the Internet: information acquisition, interpersonal communication, and online community building. Information acquisition is of importance in terms of the cognitive dimension in that what sort of information people are exposed to or willingly seek may be an indicator for their keenness on public issues and interest. Interpersonal communication is a basic process through which people get into social networks, constituting a key factor of the relational dimension. Building online community is facilitated by the asynchronous [30] and interactive [31] communication function of the Internet. Despite the controversy over the definition of the virtual communities, some online aggregations, such as Internet bulletin board (BBS), Internet café, chat-room or other virtual entities, may have a significance comparable to offline community as sources for social capital.

3-4-2. Citizens learning and public website

The Internet seems to function as an effective tool for citizen education in which citizen can learn about public issues and relate them to their own interest and values. The Internet may facilitate diffusion of “shared representations, interpretations and system of meaning among parties” in terms of the cognitive dimension (Nahapiet and Ghoshal 1998). Through that cognitive process, the members of a society become knowledgeable on common issues and enabled to discern their interests, producing more educated citizens.

In discussion of citizenship education, we need to focus on two subjects: (1) the general knowledge of the political system and the law, expressed most frequently in terms of constitutional rights and duties, basic information about governing bodies and an understanding of the electoral process and the relationship between governors and the governed, and (2) the development of civic virtues necessary for the stable functioning of liberal democracy, such as the inculcation of moral-ethical principles like self-discipline, compassion, solidarity, civility, tolerance, respect, trustworthiness, social responsibility and the like (Schugurensky 2000). In addition, from the perspective of participatory democracy, citizen education may include another value: the development of a critical consciousness. It may require public dialogues about issues of interest or about public policy to foster a more enlightened citizenship, which might be a resource enhancing citizen influence over decision-making. For example, political parties not only try to attract votes but also provide citizens with opportunities to learn about important political issues. Noting basic party goals [32] suggested in their electoral literature, Gibson and Ward (2000) identified key functions of party websites: (a) *information provision* to disseminate information to the general public about their identity and policies in an educational and socialising manner; (b) *campaigning* referring to party's overt effort to recruit voters through their sites; (c) *resource generation* to raise financial support and to recruit new members; (d) *networking* and *strengthening organisational links*, and (e) *promoting participation* to increase citizen's engagement in the political process.

Arguably, this process of citizen education helps a whole society nurture

politically-relevant social capital. As I have stated consistently, social capital in this thesis should be one that can contribute to enhancing people's political engagement and making political process work better. Harwood and Lay (2001) recommended that political capital should be distinguished from the concept of social capital, on the argument that there was a time when social associations acted as 'school of democracy', fostering political participation, but these days local civic life today may function as a refuge from politics, rather than promoting political engagement. They contend that political capital may be a stock of attitudinal resources like social capital but made up of different entities: the attitudes of trust in government, political efficacy and interest in politics. Schugurensky (2000) emphasised the importance of citizen learning in the creation of political capital, which he defines as the capacity to influence public policy making. He suggests five factors constituting political capital: knowledge[33], political skill[34], attitudes, closeness to power[35], and financial resources. *Attitude* refers at least in this thesis to those psychological traits that influence and sustain the participation of individuals and groups in the political process. The term is based on the concept of *political efficacy*, which encompasses two dimensions: *internal efficacy*, which refers to the belief that citizens can affect government policy making, and *external efficacy*, which refers to the beliefs about the political system's responsiveness to the will and actions of citizens[36].

At this point, we need to pay attention to the effects on citizen education of offline media use. Some analysts argue that offline media use decreases civic participation, for example, because of time displacement (Putnam 1995), a

perspective which has been termed *media malaise* (Norris 2000). Putnam (2000) has argued that more television viewing means less of virtually every form of civic participation. Other commentators focus on the contents of the media claiming that negative news reports on politics make people cynical and disengaged (Pinkleton and Austin 2001; Valentino, Beckmann et al. 2001). Crotty and Jacobson (1980) reported evidence showing that cynical citizens are less likely to make purposeful, informed use of the media. They surmised that cynicism reduces individuals' motivation to participate in public affairs, ultimately resulting in decreased use of public affairs–related media sources.

On the contrary, Norris (1997; 2000) argued against the media malaise hypothesis and proposed a *virtuous circle* thesis; referring to a positive link between peoples' civic engagement and news consumption. It explains the relationship between the patterns of media usage, in particular, news watching and news reading and civic engagement in three directions: firstly, people's predisposed orientation toward social and political issues encourage them to seek for more news; secondly, reading editorial and OP-ED sections of newspapers and watching news programme on TV makes people more interested in politics and knowledgeable about public issues, and encourages them to participate in social and political process; and thirdly, the process works in both directions. That is, those most interested and knowledgeable pay most attention to political news. Learning more about social and political affairs reduces the barriers to further civic engagement. The ratchet of the reinforcement moves "in a direction that is healthy for democratic participation" (Norris 1997; 2000). I would argue the synergy of the virtuous circle around

knowledge on common interest and engagement in civic activities will be a key source of social capital that may be a high degree of relevancy in political participation.

It may be possible to apply Norris' virtuous circle thesis in a reversed way which would strengthen an individual's interest in entertainment content. That is, in the same way that people's political orientation may be strengthened by political information, those people with a propensity for entertainment activities become more passionate for it because of the virtually unlimited opportunities for it on the Internet. The issue is not how often people use the Internet but what for and with what content. To induce favourable conditions for the creation of politically-relevant social capital, formal institution and civic organisations, such as governments, political parties, or civil movement groups, need to provide a high quality public information for citizens and establish trustworthy networks with them (Fuchs, Minnite and Shapiro 2000). Recently, of course, portal sites attract a huge number of Internet users by powerful search engines and integrated menus for a huge variety of information and services. Nevertheless, governments, political parties, NGOs are responsible for drawing public attention to the social agenda and providing forums in which the members of society can exchange their opinions and information. In this regard, the websites of political institutions and civic organisations become more crucial to provision of citizen education and the creation of political capital.

3-4-3. Interpersonal Ties

Manuel Castells (1996) defines a network as 'a set of interconnected nodes' and explains that network are open structures, able to expand without limits,

Integrating new nodes as long as they share the same communication codes. Putnam (1993) emphasises the importance of network as an key element of social capital: “networks of civic engagement are an essential form of social capital – the denser such networks in a community, the more likely that its citizens will be able to cooperate for mutual benefits” (p.173). Networks of civic engagement are more likely to encompass broad segments of society and secure collaboration at the community level. The definition of social capital as the ‘resources residing in the relations’ between people (Fortes 1998) focuses on the 'relations' between individuals. Some analysts (Wellman and Frank 2001; Wellman, Haase et al. 2001) use 'network capital' to refer to "relations with friends, neighbours, relatives, and workmates that significantly provide companionship, emotional aid, goods and services, information, and a sense of belonging". Social network analysis conceives of social structure as the patterned organisation of those interpersonal relationships, providing a theoretical framework for discussion of social capital.

Among many benefits social capital makes it possible for individuals to appropriate information of relevance, timeliness, and apparent trustworthiness (Sandefur and Laumann 1988). Such qualities may be conditioned by aspects of both the structural form and the contents of relationships. From an egocentric perspective, the properties of an individuals’ social structure vary from a closed one that is tightly to a collection of diverse and disconnected contacts. While a closed structure of relationships helps members with detailed comprehensive trusted information, access to diverse sources of information provides individuals with the opportunities to receive timely reports of relevant facts. The

former may be characterised as communication based on strong ties, and the latter characterised as communication based on weak ties (Granovetter 1973).

As social capital theorists have emphasised the importance of weak ties as sources of social capital, I designated the strength of ties as a key factor characterising the nature of social network. Weak ties are interpersonal connections which are infrequently maintained and non-intimate but interest-oriented (Granovetter 1973; Putnam 1993; La Due Lake and Huckfeldt 1998; Haythornthwaite 2001). By contrast, strong ties are interpersonal connections characterised by the combination of intimacy, self-disclosure, and provision of reciprocal services, frequent contact, and kinship (Wellman 2001). Both strong and weak ties play roles in resource exchange networks: pairs who maintain strong ties are more likely to share what resources they have, including emotional support; persons connected by weak ties provide access to more diverse types of resources because each person operate in different social networks and have access to different resources (Granovetter 1973; Putnam 1993; 1995; Wellman 2001). The cross-cutting ‘strength of weak ties’ also integrates local clusters into larger social system (Granovetter 1973; Putnam 1993). People receive most of their social support from people with whom they are in most frequent contact, generally characterized by strong ties (Wellman and Wortley 1990).

Many analysts argue that strong interpersonal ties are less important than weak ties in sustaining community cohesion and collective action (Granovetter 1973; Putnam 1993). On the contrary, some others compare the value of the two ties in reversed ways: strong ties offers deep feelings of affection and obligation,

and application to a broad context, whereas weak ties are relationships with superficial and easily broken bonds, infrequent contact, and narrow focus (Kraut, Lundmark et al. 1998).

It has been said that the Internet does not develop only weak ties but also strong ties. On the one hand, the Internet helps restore relationships and friendships with dispersed old friends or encourages family members away from home to talk to each other more often. On the other hand, it offers opportunities to come across an “invisible colleague” (Hiltz and Turoff 1993), like my own experience in which I have maintained weak ties with those academics and students in the United Kingdom and the United States by exchanging e-mail about common academic interests, such as social capital and electronic government, but never met them nor shared any information about personal background. The Internet may not strengthen only closed networks but also expand open networks. Social capital has been said to be able to increase in closed social networks by reinforcing solidarity as well as in open social networks functioning for cross-cutting integration. Such forms of networks may be connected with two different forms of social capital: bonding social capital and bridging social capital (Putnam 2002). Burt (2000) contends that two network mechanisms, closed network and blockage across the network hole, can be brought together in a productive way within a general model of social capital.

In my research, I deal with the social network as a source of social capital at the relational dimension. This is an arrangement based on the assumption that if two different forms of interpersonal ties can be identified in individual’s social

relations supported by the Internet, they may be connected to bonding and bridging social capital, leading to a conclusion that the Internet contributes to the development of social capital in harmony between the two forms. Although this research does not require identifying a form of social capital and measuring its amount, it may be necessary to confirm that Internet use increases either strong or weak ties to discern a specific Internet effect, in order to lend support for the following claim;

“The internet plays socially beneficial roles in a world moving towards ‘networked individualism.’ Email allows people to get help from their social networks and the web lets them gather information and find support and information as they face important decisions” (Boase, Horrigan et al. 2006).

3-4-4. Trust in virtual community

Public Sphere

As generalised trust in society is taken as a key element constructing the concept of social capital, it may be logical to incorporate trust in virtual communities into the analytical framework for understanding online social capital. It seems difficult to generalise about people’s attitude toward virtual community in terms of trust. An individual’s trust may depend totally on his or her personal experience of virtual community, whether the experience may be passive or active. We do not know the specific mechanism through which an individual’s trust in virtual community has been nurtured and the probability of whether trust is transformed into social capital at the individual level. However, the trustworthiness of virtual community and the existence of trusting members

are required in combination to constitute a significant source of social capital at the structural dimension.

Trust in virtual society of course is not unrelated to technological issues, but I would concentrate attention on two aspects of the subject: *a sense of community* as a characteristic of individual participants; and the notion of a *public sphere* as a characteristic of the social structure. Arguably, the level of trust will be associated with a great proportion of the conditions under which participants feel a sense of community, and they would engage actively in deliberative process with high level of trust when the virtual society functions as public sphere.

To start first with the issue of public sphere, many analysts (Calhoun 1992; Poster 1995; Tsagarousianou, Tambini et al. 1998; Malina 1999) have contributed to discussion of the value of virtual community as a *public sphere*. The concept of the public sphere is said to underpin the idea of communication arenas in which citizens are able to participate in democratic process (Malina 1999). It could be said that a form of the public sphere comes into existence in every conversation when private individuals assemble to form conversation groups or to exchange opinions and ideas in public. The public sphere can be understood as a realm of our social life in which the members of a society guarantee individual access to public opinion (Calhoun 1992; Malina 1999).

In fact, as usual, both optimism and skepticism seem to exist in the discussion of virtual community as public sphere. Joshua Meyrowitz (1995) argues that the new electronic media have clouded the difference between stranger and friend,

suggesting that new forms of human emotion are beginning to evolve from interactions in multiple discussion groups. Rheingold (1993) maintains an optimistic outlook toward the public sphere as he anticipates positive outcomes of sustained cultural activity and political action in shared communities. He expects that electronic networks allow people both to interact locally and transcend borders to exchange information, sharing common interests in interactive forums, which function substantially as public spheres.

By contrast, Malina (1999: 26) suggests that such a phenomenon is markedly different from the involvement of only one 'elite' public in the Habermasian formulation of the public sphere. We need to note, however, that there are obstacles to the development of virtual communities as public spheres: technologies have been socially chosen based on prevailing norms, beliefs, and social structures (Sclove 1992); globalization taking place across state borders may deepen the digital divide; captive audiences in a commercially mediated portals are easily bombarded with advertising appeals (Malina 1999). As Malina (1999) puts it: "It seems likely that the unequal gaps that already exist between rich and poor in civil society will widen dramatically if ICTs are designed primarily in support of information held as privately owned property for sale in a highly commercialized and competitive public sphere." For all the possibility of CMC sustaining an effective public sphere, the normalization thesis (Margolis and Resnick 2000) may be applied to the future evolution of the virtual community.

Although Habermas' critique of the public sphere describes its emergence as the by-product of the Enlightenment led by the eighteenth century bourgeoisie

(Malina 1999), his analysis of communication implies that every participant engaged in moral and practical discourse makes reference to a set of normative conditions of the public sphere (Dahlberg 2001). These conditions may be summarised as follows:

- *Autonomy from state and economic power.* Discourse must be based on the concerns of citizens as a public rather than driven by the media or the complex of money and administrative power that facilitates the operations of the market and state.

- *Exchange and critique of moral-practical validity claims.* Deliberation involves engaging in reciprocal critique of normative positions substantiated by reasons and thus open to critique on ground of validity and practicality rather than dogmatically asserted.

- *Reflexivity.* Participants must critically examine their own cultural values, assumptions, and interests, as well as those within the larger social context.

- *Ideal or empathetic role taking.* Participants must attempt to understand the argument from the other's perspective. This requires a commitment to an ongoing dialogue with difference in which interlocutors respectfully listen to each other.

- *Sincerity.* Each participant must make a sincere effort to make known all information - including their true intentions, interests, needs, and desires - as relevant to the particular problem under consideration.

- *Discursive inclusion and equality.* Every participant affected by the validity claims under consideration is equally entitled to introduce and question any assertion whatsoever. Inclusion, however, is likely to be limited by inequalities from outside of discourse - by formal or informal restrictions to access. It can also be limited by inequalities within discourse, where some participants dominate discourse and others struggle to get their voices heard

This set of conditions could be used to evaluate whether certain a virtual community functions as the public sphere. Davis (1999) asserts that the Internet has been overtaken by players who have dominated traditional mass media. In other words, key players in the off-line world have made changes on the Net so as to maintain their existing power and prevent the diffusion of power to other actors, which the Internet is supposed to encourage. Margolis and Resnick (2000) argue that the web today has a strong and growing commercial sector, and that government has also become increasingly interested in extending its regulatory supervision and taxing authority. That is, the colonization of cyberspace by state and economic interests is limiting the extension and autonomy of online discourse; reflexivity is often a minimal part of cyber-deliberations, and many online forums exhibit a lack of respectful listening to others and minimal commitment to working with difference (Dahlberg 2001). On a cursory examination, many virtual communities in Korea seem to fall short of the requirements of public sphere. Internet bulletin boards at a majority of portal sites in Korea are filled with articles written by a limited number of dominant activists (Joong-ang Daily 2006). In conclusion, there may

be significant limitations in explaining virtual community in terms of the public sphere thesis.

Virtual Community

However, it seems to be valid to assess the quality of virtual community by individual participants' attitudes: whether they feel a sort of attachment to their virtual experience. Jones (Jones 1997) distinguishes *virtual communities* from *virtual settlements*, the latter are objectively measurable behaviours—such as computer-mediated interaction, proportion of public communications sent or received, or continuity of participation. Not all virtual settlements are virtual communities. Virtual community requires more than behavioural indicators, such as the presence of affective bonds among the members. Conversely, the term *virtual settlements* indicates virtual social groupings that do not necessarily exhibit the properties of *virtual community* — that is, community-oriented behaviours, such as helping others or the affective bonds (Blanchard and Markus 2002). A key factor of affective bonds is a sense of community,[37] "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith the members' needs will be met through their commitment to be together" (McMillan and Chavis 1987, quoted in Blanchard and Markus 2002).

Online community builders may implement a variety of methods and strategies to upgrade virtual social groups to encourage communication among members and thereby establish group cohesion, the most basic methods being web sites, e-mail lists, private e-mail, newsgroups, chat, telephone contacts, hardcopy

communications, and in-person meetings. Combining different strategies may help strengthen the relationships and solidarity among members in a synergic way, doing away with limitations (Suler 1984). A sense of community may be dependent on the level of members' recognition of community, their identification with other members, informational and socio-emotional support, development of personal friendship with others, emotional attachment, and obligations (Blanchard and Markus 2002).

Blanchard and Markus (2002) concluded that MSN (Microsoft Network) members reported experiencing MSN as a community, but their sense of community varied with their levels of participation in the community and their perceived benefits from participating. Cursory examinations of some cases in Korea[38] support their findings: members seem to recognise their online gatherings as community; many of them can identify other members' nick names; they exchange question and answers; some of them meet outside the virtual community; leaders of the community seem diligent in the management of the community. Members of such kinds of community seem to trust other members as well as the community. However, that observation cannot be applied to all cases.

Trust

Fukuyama (1995) defines trust as "the expectation that arises within a community of regular, honest and co-operative behaviour, based on commonly shared norms, on the part of other members of that community"(p.26). In relation to social capital, he offers a circular argument by defining social capital

as “a capability that arises from the prevalence of trust in a society or in certain parts of it.” Robert Putnam, in contrast, sees trust in less general terms as one element of social capital - one of those ‘features of social organization’, along with norms and networks, which all together can improve the efficiency of society by facilitating coordinated action’ (Putnam 1993: 167). Such interest in the issue of trust seems to be closely associated with concern with the collective action problem. Trust might be an general answer to the question of how individuals manage to get their acts together collectively for common or at least compatible ends.

The issue of trust is still of importance in virtual community: trust is likely to induce cooperation and make collective actions more feasible. In some ways, the issue becomes complicated so that we need to pay attention to several aspect of virtual community. Firstly, computer-mediated social networks make possible for actors to have different identities: making the crisis of identity in modern society worse (J.S.Hwang, Cho et al. 2002). Just as we are not sure who they are on the Net, we may be sometimes doubtful about who we are. Secondly, controversies over the application of ethical standards have been raised. One case shows that a mass of Netizens taking advantage of anonymity ruthlessly attacked others[39]. Thirdly, technological stability and security may be involved in the establishment of trust in virtual community. *Trustworthiness* in computer-mediated social network embraces security, reliability, safety, and privacy, each of which involves sets of concepts and controversies (Blumenthal 1998). Emphasis on specific concepts varies among communities and with circumstances. Making information systems more trustworthy implies

“increasing the likelihood that they will do what they are supposed to do and also that they don’t do what they are not supposed to do” (Blumenthal 1998). Uncertainty and therefore how much confidence one can have in an assessment of a system is key to understanding trustworthiness.

To simplify the research model, attention will be confined to *trust in persons* we meet in virtual community. Virtual community is regarded as the source of social capital at the structural dimension. We can postulate that is members of a virtual community feel a sense of community and trust other members, social networks around the virtual community will be rich in social capital.

3-5. Engagement in Online Political Opportunities

3-5-1. Theoretical Foundation

One of the most conspicuous changes in the era of the Internet is that almost all the social and political institutions, such as government, political parties, NGOs, or social movement groups, are going online by building their own websites and opening their data bases via the Internet or other telecommunication network to the public. These changes in turn expand opportunities for individuals to become more informed, more engaged, more available for collective actions. With these changes, individual citizens can read articles and documents about policies or political issues provided by government or political parties through their websites, apply for public services to an administration office by the Internet, contact ministers directly or even the president by sending e-mail to the policy-makers' e-mail addresses that are open to the public on the government websites, and appeal to the public online to join their collective actions. I would describe these changes in the relationship between political institutions and citizens as the expansion of political opportunity. I take the term political opportunity from the theory of political opportunity structure (POS) (Kitschelt 1986; Tarrow 1994; Kriesi 1995; Sekhon 1996), which refers to the degree of openness of a political system to the social and political goals and tactics of social movements (Eiginger 1973).

My approach to the interpretation of Internet users' online behaviour in the political context owes much to theories of the political opportunity structure. I will investigate whether people's online behaviours and attitudes have significant relationship with internet-driven political opportunity. In my research,

however, the term political opportunity needs to be distinguished from the original perspective in that the approach in this study employs only the low dimensionality of the concept of political opportunities that “arise from coalition formation”(Sekhon 1996) to focus on informal movement activities ranging to more institutionalized political actions, such as signing petitions or voting.

The approach shares the emphasis placed by theorists of political opportunity structure theorists on the strategic political situation within which people decide whether or not to become active. I see Internet-driven political opportunities in line with Eisinger’s formulation of the political opportunity structure (Eisinger 1973) as the degree of openness of a political system to the social and political goals and tactics of social movements. The Internet can be said to facilitate the openness of formal political structure, for example, by encouraging government organizations to set up their websites through which they provides access to public information as well as gathering public information.

The concept of the political opportunity theory (POS) has evolved from a theory of conflicting or contentious politics rather than a stable, institutionalised process of politics. However, it can be used to explain a normal political process (Schneider and Foot 2002). In reality, even normal processes of politics involve lobbying, persuasion, and collective appeals carried out by interested groups and individuals toward policy-makers or political elites, which may be understood as a form of political interaction between the interested and policy-making authority. In these political processes, the political opportunity structure is established between individual, civil society, and government specific configurations of resources, institutional arrangements and historical

precedents for social mobilisation, which facilitate or constraint collective actions (Kitschelt 1986; Tarrow 1994; Jenkins and Klandermans 1995). Tarrow (1994) defines the POS as the consistent - but not necessarily formal and permanent - dimensions of the political environment that provide incentives for people to undertake collective action by affecting their expectations of success or failure. The POS do not necessarily determine the course of collective actions, but “careful comparisons among them can explain a good deal about the variations among social movements with similar demands in different settings, if other determinants are held constant” (Kitschelt 1986). It influences the options of those actors involved in movement and the impact of such movements on their social and political environment (Kitschelt 1986). Kriesi (1995) proposes three broad sets of the political system’s properties, at which the level of the POS can be measured; (a) formal institutional structure; (b) informal procedures and prevailing strategies; and (c) the configuration of power.

In fact, I do not propose to take any variable directly from properties of the political system affected by the Internet. Rather, my approach is to examine how Internet users respond to the changes mediated by the Internet on the formal structure and informal procedures of the political system.

Without necessitating physical involvement or action in the off-line world, people can participate in political activities using the Internet, such as sending e-mail to politicians or donating a campaign contribution. The Internet gives citizens more opportunities to take political action through networked personal

computers. This increase in political opportunity is in fact a form of Internet influence on politics. It includes, among other things, greatly improved access to political information, direct contact with politicians and enhanced availability of collective action with low transaction costs (Shah and Kwak 2001). In addition, the evolution of electronic government makes possible the online delivery of public services (UN 2004).

I would highlight that the medium has caused significant changes on the political opportunity structure, a characteristic feature of which is, I would argue, is electronic governance. In terms of this research what matters are people's interactions and their behaviours in response to such changes. POS can be an effective tool for the analysis of political use of the Internet or the politics of virtual community. Among the advantages of the POS concept, is that it becomes possible to depict evolving virtual political communities within the setting of given formal institutions and informal procedures; the former can be described as 'hard' factors and the latter as 'soft' factors (Uhm and Hague 2001). Broadly speaking, informal procedures and strategies employed within the existing institutional structure are rather flexible but unpredictable, in other words, they are relatively 'soft'. The institutional structure, by contrast, is procedurally less flexible in accommodating citizen's activity because it is mandated by law.

3-5-2. Formal political institutions

The level of the POS on the Internet is determined in a major way by the extent to which governmental power is concentrated or diffused. Where authoritative

powers are decentralized decision making processes will probably be shorter or more accessible; where the extent of decentralisation is substantial, channels enabling a degree of direct citizen influence, or even control over policy agenda setting and decision-making processes within government may exist. That is, the extent of formal access to political institutions and political decision making processes will be a function of the degree of decentralization, and of the degree to which direct democratic procedures have been institutionalised.

The government's adoption of the Internet in no way automatically ensures the decentralization of decision-making functions. Rather, these same technologies may enable government decision-making to become more centralized, through enhanced co-ordination and control through informatics. An effective capacity to implement decisions under conditions of widely dispersed network-based power is quite another matter.

Despite the possibility of more centralization with respect to the output side, the Internet can and does contribute to improved public access to formal institutions. Whether organisations become centralised or decentralised should not be assessed by the location of decision-making but by information flow and rationality in operation of the organisation. The possibility of centralisation by adopting the Internet may well be considered from the notion that democratic values and effectiveness can come together.

The nature of the political opportunity structure in relation to the internet is determined partly by the extent to which governmental power is concentrated or diffused. The greater the degree of decentralisation, that is, the greater the

number of points of access to formal institutions, and thus the wider in theory may be the extent of formal citizen access. Decentralisation of access is regarded as one of the main changes in the political opportunity structure brought about by the Internet (Abramson *at al*, 1988; Tyler, 1997). For example, Korean government websites and e-mail systems facilitate communication between citizen and decision-makers. All websites of government ministries and agencies have common menus through which citizens can input their voice toward policy-makers and political leaders by e-mail and using specially designed message forms.

3-5-3. Informal Procedure and Prevailing Strategies

Informal strategies or procedures typically employed by decision-makers in response to citizen inputs are more important than formal arrangements in that such informality makes formal organizations more flexible than formal procedures. Kriesi (1995) introduces the concept of the 'dominant strategy" to characterise the informal premises of procedure as "the shared implicit or explicit understandings that emerge from the political process and guide the actions of the authorities". He categorises such strategies into two broad groups; strategies of exclusion (repressive, confrontatory, and polarizing) and strategies of integration (facilitative, cooperative, and assimilative).

However, a modified classification is needed to describe online politics more appropriately, rather than the terminology of exclusive or integrative strategies originally intended to characterise relationships between authority and civic movement activists. Uhm and Hague (2001) argued that government's informal

procedures and strategies fall into either “active” or “passive” reactions. A government with a passive orientation toward citizen’s participation in online participation tends to confine online engagement to relatively narrow channels, for example e-mail exchange. An active government, by contrast, shows greater willingness and openness, by establishing and promoting, for instance, a fully interactive online channel through which people can share opinions and interact with each other, as well articulate a varied range of opinions and demands to government.

3-5-4. Power Arrangement within and between Political Institutions

The distribution of power within and between political institutions affects the POS, and we postulate that the Internet tends to reinforce, rather than alter, this relationship. The political authorities, particularly the executive, have the advantage of superior resources to set up and maintain websites and e-services to fully professional standards (Margolis and Resnick, 2000). The citizen using a government website does so on the webmaster’s (i.e. the government’s) terms. Sometimes, however, the advantage may not entirely lie with those in authority. The distribution of power may be narrowly balanced, or competition between political parties at national or local levels may affect the expectations of citizen participants. In his discussion of the POS, Tarrow (1994) points out that electoral instability may induce political elites to compete for the support of voluntary associations. Maloney *et al* (2000) argue that the configuration of power among senior officers and between different departments may create cleavages and divisions that can be exploited by voluntary associations. This creates niches and access points that can be

identified and exploited by nimble groups and resourceful citizens, using the capabilities of the Internet.

The interaction between the political representation system and social movements will be an endogenous variable in this study. The questions at issue are what changes have occurred and are under way in the relationship of citizens with the political representation system and with social movements.

Many theorists argue that the classical theory of social capital lacks a consideration of top-down effects and that institutional initiatives should be taken into account (Tarrow 1996; Maloney, Smith et al. 2000).

Putnam has been criticised for his perception of the state as an exogenous factor in generating social capital (Tarrow 1996). He neglects the role played by social and political institutions in shaping the context of associational activities and hence the creation of social capital (Maloney, Smith et al. 2000). It is necessary to take institutional factors into account for more complete understandings of how social capital is produced.

However, this study does not put its focus on the POS itself but on individuals' perception, engagement, and assessment of the four opportunities: availability of political information online, greater accessibility of public services, direct contact with policy-makers, and lowered cost of collective actions. This approach is crucial to understanding online politics in general and people's political involvement online in particular. The Internet does not simply increase the number of people who participate in politics. There may be psychological, social and cultural factors that distinguish those who become more active in

political engagement from those who remain inactive. In other words, the perception and the utilisation of the POS may be closely related to media opportunity and social opportunity, This analysis constitutes the core part of research theme; the political anatomy of internet users. That is, it is expected to reveal the political implication of patterned Internet usages and Internet-supported interpersonal ties by relating those variables to people's perception, attitude, and behaviour in dealing with Internet-driven POS or political employment of the Internet.

In addition to those variables belonging to media and social opportunity, four more variables tapping individuals' political orientation off-line are added to the model of political opportunity. This is to confirm a hypothesis that those who are already involved in politics will be distinguished from those who are not in terms of the degree of awareness, practice, and evaluation of the POS.

3-6. Research Agenda

3-6-1. Research Interests

Some analysts share a research interest with me in patterns of Internet usage which are positively related to the production of social capital. Shah, Kwak and Holbert (2001) analysed the association between Internet use and the production of social capital in four steps: (a) to examine relationships between overall Internet usage and civic engagement, interpersonal trust, and contentment; (b) based on the idea that not all television watching has uniform impact on social capital, to isolate the impact of different forms of Internet use on social capital; (c) to investigate the relationships of demographic and contextual variables as well as other forms of media with civic consequences; and (d) to analyse the predictive strength of each form of Internet use across three generational age breaks: Generation X, Baby Boomers, and the Civic Generation. They broke down Internet use into four components - social recreation, product consumption, financial management, and information exchange – and then identified that, while social recreation is negatively related to the production of social capital, information exchange is positively related to civic engagement and the production of social capital. Using structural equation modelling with the dataset of the Survey2000, Gibson, Howard and Ward (2000) attempted to identify causal relationships between social capital, Internet connectedness and political participation. They developed a typology of Internet users – socialisers, utilitarians and game-players – and examined their influence on social capital and political participation. Based on their survey in Korea, Oh et al (2000) categorised Internet users in Korea into six groups: communitarians, elitists, democratic mobilisers, club members, self-developers,

and mass-manipulator.

Despite the common academic interest, my approach differs from these previous works: firstly, my model has no variable representing social capital itself, rather the source of social capital or conditions under which social capital is most likely to be created; secondly, this research highlights relationships between people's motives for Internet use and their behaviours and attitude on the sources of social capital, rather than proposing a typology of Internet users. Thirdly, I introduced the concept of political opportunity as a way to examine internet impact on participatory political processes.

The research agenda to be examined in the model are: (1) Do people actively choose the Internet and the mode of its use to attain their communication goals?, (2) Does Internet use makes their daily life more diverse, prosperous and convenient than before?, (3) Do people feel that Internet use also offers new online opportunities for political participation? People who adopt the Internet do not only use it in their daily lives as a substitute for supplements to television, newspaper, or telephone but also use it to further their interest and concerns in political or public issues. In the course of daily life, people could create or lose social capital as a resource residing in social networks. By contrast, people are likely to encounter political opportunity in their political lives with the Internet.

Social capital may be created in people's daily use of the Internet, expanding and maintaining social networks through which they exchange social support and information with each other, nurture the norms of reciprocity and

cooperation, and expand networks of civic engagement (Putnam 1993; Rheingold 1993). Supporting the argument that social capital is not automatically associated with political participation (Putnam 1993; Rheingold 1993; Newton 1999; Norris 1999; Harwood and Lay 2001), I would argue that this aspect of people's daily Internet use should be related to their political use of the medium in order to examine the political implication of Internet-driven social capital. In other words, viewing online conditions generating social capital as independent of online engagement in politics, I would examine whether there is any causal relationship between the two entities. However, this does not mean people's daily use of the Internet is completely free from a political character. People may well use the Internet to conduct political activities as part of their daily life: for example, consumers may post complaints on the electronic bulletin board of the Consumer Protection Board[40], which is intended to mobilise consumer's collective action as well as draw government attention to the issue concerned.

The three research agenda outlined on page 137 require two tasks to address;

- What modes of Internet use are associated with favourable conditions under which social capital is most likely to be created? In other words, who uses the Internet so as to create social capital?

- Do such conditions have a positive influence on political participation?

These two research questions can be integrated into one theme, the "political anatomy of Internet users," which may be carried out by means of the analysis of "Internet influence on social capital and political opportunity."

3-6-2. Who uses the Internet so as to create social capital?

As a way to examine *who are establishing positive conditions for the creation of social capital through their daily use of the Internet*, I focus, firstly, on their engagement in the three sources of social capital: public information providing websites, mixed social networks of strong and weak ties, and virtual communities as a form of public sphere, which can be said to reside respectively at the cognitive, relational, and structural dimensions (Nahapiet and Ghoshal 1998). That is, the source of social capital is distinguished from the conditions under which social capital may be created. The condition is formulated by people's habitual and patterned Internet use, so as to be that are productive in the creation of social capital.

The conditions positively related to social capital sources are as follows:

- Internet users will become knowledgeable and informed on matters of common interest and public issues by using the Internet;
- Their offline, as well as online lives, exemplify relationship based on both bonding and bridging social capital;
- Some of them seek to make virtual communities trustworthy, internalising and promoting norms of reciprocity.

The conditions negatively related to social capital sources may be as follows:

- Internet users will disengage themselves from civic life by indulging in private pleasure and entertainment available on the Net;

- They are not interested in the establishment of interpersonal networks by the Internet;

- Using anonymity or technological tactics, they tend to behave unfaithfully towards other members of virtual community resorting for example to bullying, spreading false or malicious information, or disseminating computer viruses.

The second agenda to tackle in relation to the condition is to explain such behaviours and attitudes through daily Internet use. I found the most useful explanatory variables relate to Internet users' psychological factors, not from technological characteristics of the Internet nor from intensity and frequency of individual Internet usage, such as hours of using the Internet or the amount of email sent and received. Literature on the use and gratification theory provides a set of common factors explaining individual motives for media selection and usage (McLeod and Becker 1981; Shah 1998; Angleman 2000; Robinson 2000; Shah and Kwak 2001; Luo 2002).

The three needs identified in this research are as follows:

- Some Internet users report that the Internet to obtain new and useful information more often than for other purposes, which can be regarded as an informational need;

- Some Internet users report that they use the Internet more often to communicate with other persons than for other purposes, which may be regarded as motivated by *social needs*;

- Some Internet users report that they rely on the Internet mostly to pass the time enjoyably which may be regarded as motivated by *emotional needs*.

It is hypothesised that those people who are motivated more by social or informational needs than emotional needs will use the Internet in ways more contributory to the creation of social capital. This hypothesis is based on literature on the relationship between media use and civic life, although such analyses has been conducted in the context of traditional media, such as TV and newspaper. Putnam (1995) suggested two points to explain decrease in civic engagement: first, news and entertainment have become increasingly "individualised"; secondly, electronic technology allows us to consume the hand-tailored entertainment in private, even utterly alone. Arguably, such trends may reflect people's behaviours and attitudes motivated by emotional needs.

3-6-3. Who Engages in Online Political Opportunity?

Based on the examination of the influence of the conditions under which Internet users can appropriate social capital easily for the attainment of their goals, we need to concentrate analytical effort on confirming the positive relationship between the conditions and their actual engagement[41] in online political opportunities. This seeks to clarify the political implication of social capital modified either positively or negatively by the Internet.

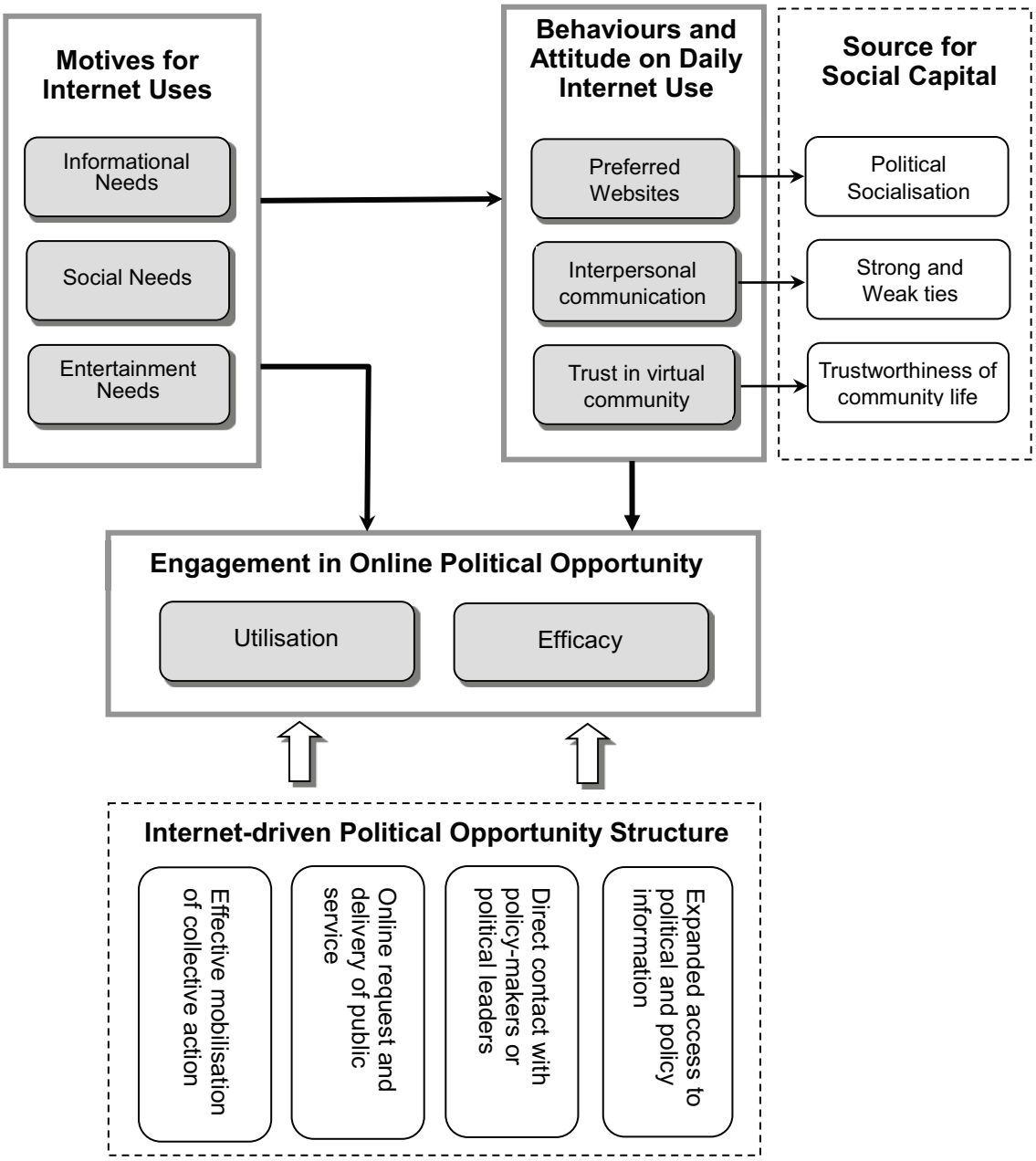
It is necessary to distinguish between the terms, *activeness* and *positiveness*, in describing two variables concerning Internet users' engagement in political opportunities. The assumption is that different people may show different levels

of *activeness* in the utilisation, and different level of *positiveness* in the efficacy, of political opportunities made available by the Internet. Individuals may have different incentives to seek online access to political information, to manifest their voice through email to policy-makers, to request online delivery of government services, or to mobilise for collective action. While some individuals may be satisfied with the substantive or potential outcome of their actions, others may not. Even those Internet users who frequently participate in political opportunities may be sceptical about the outcome of those opportunities in some or many cases. In this regard, *positiveness* on the usefulness of political opportunities may not necessarily comport with *activeness* in utilising political opportunities. This is one aspect of the merit of this model in which two independent variables, *utilisation* and *efficacy*, are set up to describe individual engagement in political opportunities. The variable of *utilisation* is to measure the level of perceived frequency or activeness in using the opportunities. The variable of *efficacy* needs more clarification. Efficacy is the capacity to produce an effect. It is used to mean different specific things in different fields. Political efficacy has been defined as the feeling that political and social changes are possible and that individual citizen can play a part in bringing about these changes (Cambell, Gurin et al. 1954). Political efficacy can be understood in terms of two different but interconnected dimensions: while *internal* political efficacy refers to “beliefs about one’s own competence to understand, and to participate effectively, in politics”, *external* political efficacy refers to belief about responsiveness of government authorities and institutions to citizens’ demands” (Niemi, Craig et al. 1991). In my research, the variable of efficacy on engagement in online political opportunities may incorporate the two meanings

with rather more focus on perceived external efficacy. “Efficacy is thus feeling by internet users that the Internet has made significant changes in the political process and their use of online political opportunities will contribute to making the political process work better.”

Another issue to be clarified here is paths through which the conditions for the creation of social capital may exert their influence on people’s behaviours and attitudes toward political opportunities, or engagement in the opportunities. Theoretically, people’s behaviours and attitudes on political opportunities may not only be affected by the condition, habitual and patterned mode of their Internet usage, but also by their motives for Internet use: social, informational, or emotional needs. Consequently, we need to set two paths through which Internet use may influence individual engagement in political opportunities.

Chart III-3 Conceptualised Research Model



3-7. Summary and Conclusion

This chapter introduced a variety of theories and theses which have been employed to compose the research model which seeks to explain the impact of the Internet on the political process. The model assumes that Internet users actively choose the Internet to effectively attain their individual goals and develop their own patterns of Internet usage. Under some conditions their usages may contribute to the creation of social capital at the individual level and in other cases the pattern of Internet use may not be related to social networking. Based on the theories introduced Chapter 2 and Chapter3, an analytical framework for sources of social capital was constructed in order to set up the conditions under which Internet users are likely to create and maintain social capital.

Analytical interest will concentrate on Internet users' behaviours and attitudes on the sources of social capital at the three levels: cognitive, relational and structural levels. The use and gratification theory provides explanatory variables, which relate to Internet users' behaviours and attitudes on the sources of social capital and online political opportunities. The model is expected to answer the question: do those who are using the Internet so as to create social capital engage actively and positively in online forms of political opportunities. The model is composed of three clusters of variables the first one concerns: motives for Internet use are subject to the first one; the sources of social capital constitute the second one; and the Internet users' engagement in political opportunities are the dependent variables in the third cluster.

Part II

Empirical Analysis

Chapter IV Structural Equation Model Analyses

4-1. Overview

This chapter is aimed at identifying convincing evidence to prove that various factors are involved in individuals' uses of the Internet and that some usages contribute to the creation of social capital and engagement in online political opportunities. Based on the variety of theories reviewed in the previous chapters, the structural equation model is employed to analyse, interpret and confirm the evidence.

The evidence will be tested against hypotheses: the hypotheses are set to describe the three paths. The first path is the causal relationship between motives for Internet use and the sources of social capital, corresponding to answering the question: who are using the Internet so as to create social capital. The second hypothesis proposed a path from the sources of social capital to engagement in online political opportunities, under the presumption that the general usage of the Internet can be applied to the political use of the medium. The third hypothesis signifies again the impact of motive factors on individuals' behaviours and attitudes on online political opportunities.

I used DATA 2005 for the structural equation model (SEM), which I have obtained from the second survey with the questionnaires which, unlike the first survey in 2001, was designed appropriately for the SEM. The data characteristics are analysed partly in comparison with those of the first data set and with other sources.

4-2. the Model

4-2-1. the Structure of the Model

My research model is aimed at showing what mechanisms encourage individuals to use the Internet so as to create social capital and participate in the political process. The approach is not to suggest any form of typology by which Internet users are classified but to establish a set of paths in which people use the Internet regularly for everyday life and apply the pattern and skills obtained from general usage consciously or unconsciously to political participation. Such an examination will show that different people use the Internet in different modes, resulting in great variation in the creation of social capital and engagement in political opportunities.

This research project started with the questions: what makes for the variation in Internet usage? To answer that question, I put the focus on Internet users' motives, behaviours and attitudes in using the Internet. Firstly, individuals' motives for Internet communication may be assumed to have effect on the sources of social capital through their daily use of the Internet. Among many types of motives for personal use of the Internet, there are at least three needs which can be satisfied by the medium: information seeking needs; interpersonal connection needs; and pleasure seeking needs. There could be other needs to motivate people to use the Internet, but my model confines the independent variables to these three needs. Secondly, I draw up a set of the sources of social capital that are relevant to the online context: public information, social

networks and trust in virtual community, based on the theoretical analysis social capital suggested by Putnam and other social capital theorists. Thirdly, I would assume that individuals' use of the Internet as a means of engagement in political opportunities may heavily influenced by their general pattern of and motives for using the medium. Internet use for some form of political engagement may be motivated by internal needs, using skills developed in daily general use, and strengthened by any payoff from the activity. At this stage, not only the motives for Internet use but also general patterns of Internet use will be treated as independent variables and engagement in political opportunities will be the dependent variable.

4-2-2. The Variables

Exogenous Variables

As a prefatory step, it may be useful to compare two groups of variables in terms of explanatory power. A group of variables seeks to describe an individual's explicit characteristics in using the Internet, such as intensity or frequency of Internet connection. Another group of variables, based on the use and gratification theory, has been employed by other analysts (Gibson, Howard et al. 2000; Oh, Kim et al. 2000) in their examination of Internet users' behaviour and attitudes in relation to social factors. While the first group of variables can be measured by counting hours of using the Internet or the number of emails exchanged, the second group of variables is not directly measurable but derived from factor analysis.

To identify contextually similar data from questionnaires investigating motives for internet use in two surveys of 2002 and 2005 (see APPENDIX IV and APPENDIX V), exploratory factor analysis with the rotation technique of VARIMAX is applied. In general, questionnaires with the large loading value in the same factor are classified into the same context and the sufficient number of factors to describe covariance structure of all surveyed variables is generally considered as the number of factors with Eigen values greater than 1. The latent factors would be identified by attributes within the responses of the two questionnaires which have large and corresponding loading value (R. A. Johnson and D. W. Wichern, 1992). Factor analysis, which describes the structural relationships within the two sets of data in terms of a few underlying, but unobservable factors, generated similar results, namely three factors, which we may conveniently label as social, informational, and emotional needs, as follows in Table IV-1.

Table IV-1. Motives for Using the Internet: Exploratory factor analysis of survey data in 2005

Reason for using the Internet:	Component		
	Factor 1: Social Needs	Factor 2: Informational Needs	Factor 3: Emotional Needs
to obtain useful information	.010	.827	.116
to pass the time	.057	.235	.808
to find someone who shares the same ideas	.737	.199	.082
to get up-to-date news	.113	.788	.132
to exchange ideas and information with others	.588	.494	-.036
to persuade others into joining my project	.797	-.102	-.052
to learn something new	.265	.758	.034
to ask others for help	.647	.144	.013
to escape from my boring life	.537	-.126	.492
to maintain a good relationship with others	.744	.142	.183
to make life more convenient	.129	.759	.217
to manage resources in a remote place	.528	.254	.065
to enjoy something exciting for a moment	.136	.555	.642
to have conversation with many people	.730	.120	.265
Eigen values	5.13	2.30	1.05
Cumulative proportion of total sample variance explained (%)	36.6	53.1	60.5

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The principal factors, which are those with an eigenvalue of at least 1, disclosed by this analysis seem to be distinct and relatively independent of each other. It seems appropriate to identify each factor in terms of the questionnaire item clearly associated with it by virtue of having the largest loading value. The largest single factor, social needs, accounts for 36.6% of the sample variance. The three factors in Table IV-1 are taken together account for 60.5% of the sample variance. Factor 1, labelled ‘social needs’, is characterised by the use of the internet for communication with other individuals, whether to

maintain relationships with family and friends, or to find and interact with people of similar interests or outlook. Factor 2, labelled ‘informational needs’, is characterised by the use of the internet to seek out information, news in a fast and convenient way. Factor 3, labelled ‘emotional needs’, is characterised by the use of the internet for personal pleasure, entertainment and to pass the time agreeably. Exploratory factor analysis thus enables us to identify three relatively distinct factors, derived from 14 questionnaire items investigating motives for internet use. These factors will subsequently form the basis of the research model which will follow.

Now, I have two groups of variables to characterise individual Internet users: one group is composed of measures of duration, intensity and frequency of Internet connection, which are explicit characteristics; the other group is composed of motivational factors, in other words psychological factors of user characteristics. It may be useful to compare these two groups in terms of correlations with dependent variables, in order to assess their explanatory power relative to each other. That examination may tell which group of variables are more relevant to the explanation of Internet influence on Internet users’ behaviours and attitudes.

The survey conducted in 2005 produced seven dependent variables: two variables of frequency to visit public and entertainment websites are directly recorded; and five variables are derived from factor analyses. I will relate these dependent variables to the two groups of independent variables describing internal and external characteristics of Internet users respectively.

The following table shows the result of pairwise correlation analysis between the independent variables and the dependent ones: while the number of e-mails sent may show a significant relationship with some dependent variables, the overall feature of Table IV-2 is that motive variables show a stronger relationship with the dependent ones.

Table IV-2 Pairwise Correlations of Explanatory Variables with Behavioural Variables

		Efficacy	Utilisation	Virtual Trust	Weak ties	Strong ties	Public websites	Entertain-ment websites
Years of using the Internet	Pearson Correlation	.092(*)	.072(*)	.008	.091(*)	.057	.065	.091(*)
	Sig.	.012	.049	.838	.013	.124	.079	.013
Number of emails received	Pearson Correlation	.074(*)	.112(**)	.111(**)	.183(**)	-.080(*)	.030	.171(**)
	Sig.	.045	.002	.003	.000	.029	.415	.000
Number of emails sent	Pearson Correlation	.035	.070	.059	.070	-.002	.053	.494(**)
	Sig.	.337	.056	.111	.058	.953	.148	.000
Social needs	Pearson Correlation	.113(**)	.344(**)	.338(**)	.392(**)	.203(**)	.060	-.008
	Sig.	.002	.000	.000	.000	.000	.100	.818
Informatio nal needs	Pearson Correlation	.396(**)	-.098(**)	-.037	.239(**)	.147(**)	.076(*)	.085(*)
	Sig.	.000	.007	.314	.000	.000	.039	.021
Emotional needs	Pearson Correlation	.050	-.102(**)	.022	.039	.067	-.019	.092(*)
	Sig.	.171	.006	.548	.288	.067	.604	.012

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table IV-2 broadly shows that variables relating to internal motives have more significant relationships with the dependent variables in the table compared to the variables of external user characteristics. The fact that the variable of emotional needs has weak or slightly negative correlation with dependent variables may mean that it lacks relevance to this study but rather that it

requires a distinct and contrasting interpretation to the other motivational variables[42].

Variables of Social Capital Sources

The model based on the discussion in Part 1 of this study posits three sources of social capital at cognitive, relational and structural dimensions: public information, social network, and virtual community. Public information, as the opposite of private information, refers to forms of news, data, information, or even knowledge, through which common interests and public issues may be addressed. The term social network is confined to interpersonal relations in the ego-centric context, the essence being communication between specific individuals. The operational definition of virtual community is the channels allowing people to exchange ideas and opinions electronically, such as Internet bulletin board or Internet café.

What we need to note is that the sources of social capital are people's behaviours and attitudes toward Internet use, including (a) how actively they seek for public information or how far do they keep away from it; (b) how much do they develop weak and strong social ties of interpersonal relations; and (c) in what mode do they participate in virtual communities? Five variables are set out to measure the sources of social capital at the three levels:

- The sources of social capital at the cognitive dimension are measured by two indicators, *the frequency of visiting public website* and that of visiting entertainment websites. The directions of the two variables may

or may not be opposite but the values will be independent from each other.

Questionnaire Items, 2005 Survey.

1. How many times per month on average have you visited each sort of websites below over the last year?
   A. **Public Websites** (e.g. managed government, political parties, civil movement groups): times per month on an average
   B. **Entertainment Websites** (e.g. those websites providing entertainment contents, such as lottery, games, pornography, or celebrity news): times per month on an average

- To identify *weak* social and *strong* ties of interpersonal relationships, the measurement of seven items, which are questions asking about various aspects of interpersonal relations, are put into factor analysis. I provided the following list of statements each of which the respondents were asked to check on the seven-point Likert scale[43].

Questionnaire Items, 2005 Survey.

1. I become closer with those people with whom I have stayed in touch.
2. I can get in touch with those people whom I have lost contact with.
3. I've got to know new people.
4. I can see increased communication with my family members (who may live with me or elsewhere).
5. I've participated more frequently in associations, social gatherings, club meetings.
6. There are more people who are helpful to me.
7. I have more opportunity to meet people coming from different fields

- In the initial stage, two variables were used to identify and measure the mode and attitudes of people's participation in virtual community: frequency of joining virtual community activities and the level of trust

in virtual community. The former the behavioural variable of the Internet user and the latter their attitudinal one. Theoretically, the behavioural variable seemed to be more relevant to modelling than the attitudinal one, the level of trust, in that it is at the same behavioural dimension with other variables, such as frequency of visiting public websites. However, it seems that the frequency of joining virtual community is so complicated that its cause and effect cannot easily be isolated. The wording of the question for the variable is as follows.

Questionnaire Items, 2005 Survey.
Recently, Internet users are coming together through Internet cafes, Internet hobbyist group, or online discussion forum, and building virtual communities. Over the past year, how many times on average per a month have you joined in activities such as posting messages to Internet bulletin boards or participating in online discussion?

Positive responses to this question do imply user's activeness in one or more virtual communities. However, the problem is that some Internet users could participate in virtual communities frequently with unfriendly intentions. In such case, the frequencies of participation may be negatively related to the creation of social capital. Taking advantage of anonymity, some people use the Internet to disseminate false information or criticise other members of the virtual community. In other words, behaviours reported by Internet users may not be confirmed by their real usage in the private space in which they operate their computer networked to the Internet. Recognising this aspect of joining virtual community makes interpretation of reported data less straightforward. The level

of trust in virtual communities was measured by the following five questions on a seven-point Likert scale.

Questionnaire Items, 2005 Survey

1. In general, I trust the virtual communities I use regularly.
2. No one seems to abuse her or his anonymity.
3. There may be few people with indecent motives.
4. Most people there seem to behave reasonably and not angrily.
5. My online activities are not under surveillance.

All variables except for one, entertainment websites, may function as the elements of conditions under which the creation of social capital is more likely than otherwise. The set of criteria is developed based on classical theory of social capital and other related literature. The more frequently Internet users visit public websites, the lesser frequently they visit entertainment website, the more weak and strong ties they maintain, the higher level of trust they have in virtual community, the more likely social capital is to be created.

Variables of Engagement in Online Political Opportunity

Among many changes caused by the Internet, I would draw attention to four developments occurring with significance for the political process: (a) widened access to political information; (b) more open and direct channels for contact with policy-makers; (c) availability of public services delivered online; and (d) facilitation of collective action with low transaction cost. Such phenomena can be described as changing the political opportunity structure (Tarrow 1994; Kriesi 1995; Sekhon 1996). My interest is not concentrated on those political opportunities themselves but on how Internet users accommodate such changes; learning and practising the opportunities, assessing the value and

utility of the opportunities. The questionnaires employed in this research were designed to measure Internet users' *activeness* in utilising those political opportunities as forms of political participation and their *positiveness* in assessing such opportunities from the perspective of participatory democracy. The level of activeness is reflected by *frequency of utilising* one or more online political opportunities. The positiveness in evaluation of the opportunity can be paraphrased as the belief that online political opportunity makes some differences in political process: in other words, the *efficacy* of online political opportunity. That is, Internet users' engagement in online political opportunity depends both on the frequency of utilising such opportunities and on the perceived efficacy of the opportunity. Those who frequently use online political opportunities may believe that online political opportunities make significant changes in political processes, contributing to the development of participatory democracy. However, the model presumes that the two variables are independent of each other: frequent users of online political opportunities do not necessarily expect much productive functions of the opportunities. The variables of engagement in political opportunity are two: frequency of *utilisation* of the opportunity and *efficacy* of the opportunity. The data was tested for inter-item consistency, or reliability, of responses using Cronbach's alpha. For frequency of utilisation Cronbach α=0.75, suggesting that responses to these questionnaire items were substantially reliable[44]. For efficacy of utilisation, Cronbach α=0.84, suggesting even stronger internal consistency in respondents' answers to these items.

These variables were measured by the following questions on a seven-point

scale in the survey in 2005, but the same questions were asked of respondents in a categorical choice, yes or no, in the 2001 survey. The questions are reproduced in the box below.

Questionnaire Items, 2005 Survey

The four statements below are about the way the political process in Korea has been changed by the Internet. Please tick a point corresponding to the degree of your own involvement and to the degree to which you agree with the statement below.

A. **The Internet enables people to get plenty of information about specific policies or political issues.**
   - How frequently do you use such online public information?
   - Do you think online public information contributes to the development of politics or public administration?

B. **The Internet facilitates individual citizen's direct contact with policy-maker or political leader through e-mail or electronic bulletin board.**
   - How frequently do you send messages to policy makers or political leaders through the Internet?
   - How much do you think this kind of contact contributes to development in politics or public administration?

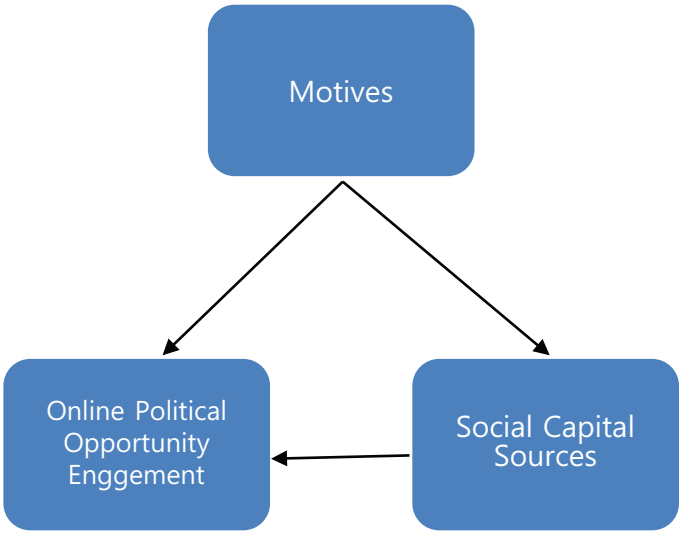
C. **The Internet tends to make the response of public agencies or services requested by citizen more available and convenient.**
   - How frequently do you use such services mentioned above?
   - How much do you think such online change in the work of public agencies contributes to development in politics or public administration?

D. **As the Internet makes it easy to communicate with other people who share similar political opinions, it is a very effective way to mobilize for collective actions in order to appeal against specific policies or to request government actions.**
   - How frequently do you practice such actions? (e.g. writing 100-word comment on newspaper websites, participation in cyber demonstration)
   - How much do you think such changes contribute to development in politics or public administration?

4-2-2. Hypotheses

It is argued here that the influence paths of Internet use start from people's goal-oriented usage of the Internet, configured by their internal motivation. As endogenous variables, the three factors drawn from the factor analysis -- informational, social, and emotional needs –impact on people's engagement of online political engagement through two paths: one is to indirectly influence the dependant variables via the sources of social capital; and the other is to directly influence the dependent variables. In other words, the model presumes that people's utilisation of online opportunities and their feelings of efficacy about such opportunities are conditioned by the patterns of their general Internet usage and internal motives for Internet communication. As shown in Chart IV-1, hypotheses were set up to test these relationships: (a) Influence path from the variables of people's motives for Internet use to the sources of social capital at the three dimensions; (b) that from social capital sources to online political opportunity engagement; and (c) that from the motives to the engagement.

Chart IV-1 Conceptual Relationships among Motives, Social Capital Sources, and Online Political Opportunity Engagement



Hypothesis 1: people's motives for Internet use influence the sources of social capital.

There are three principal motives for Internet users: informational needs, social needs, and emotional needs. Three sources of social capital are linked to the three dimensions: frequency of visiting websites at the cognitive dimension; strength of interpersonal ties at the relational dimension, and trust in virtual community at the structural dimension. Firstly, there are two variables designated to measure value from the source of social capital at the cognitive dimension: frequency of visiting public websites and that of visiting entertainment websites. While the former variable is expected to have positive value, the latter has negative value on the creation of social capital. Secondly, two variables, of weak and strong ties respectively, are expected to have positive effect on the source of social capital at the relational dimension. As theorists suggest, weak ties of interpersonal relationships may contribute to the

development of bridging social capital and strong ties may support bonding social capital. Lastly, trust in virtual community will be measured as the source of social capital at the structural dimension. Hypothesis 1 describes the causal relationship between internal factors for Internet use, motives, and external behaviours and attitude in online life. Testing the first hypothesis helps answer the question: who uses the Internet so as to create social capital? To clarify the causal relationship between independent variables and dependant variables, Hypothesis 1 is divided into three sub-hypotheses;

Hypothesis 1-1: people's motives for Internet use influence the frequency of visiting websites.

Hypothesis 1-2: people's motives for Internet use influence their interpersonal ties of social network.

Hypothesis 1-3: people's motives for Internet use influence their trust in virtual community.

Hypothesis 2: people's behaviours and attitudes regarding the sources of social capital influence their engagement in online political opportunities.

While the variables of social capital sources at the cognitive and relational dimensions measure behavioural values, the source at the structural dimension provides attitudinal value, the degree of trust in virtual community. These behaviours and attitudes of Internet users give birth to a pattern of general Internet usage. The model sets out two ways of engaging in online political opportunities: *utilisation* as an indicator for activeness in using the opportunities, and *efficacy,* as an indicator of the degree of feeling regarding the opportunities

as effective. Hypothesis 2 describes the relationship between peoples' general use of the Internet and their engagement in online political opportunities, in other words, their political use of the Internet. The stress may well be put on the latter part of the sentence, political use of the Internet. To further clarify the description, we can set two sub-hypotheses under Hypothesis 2;

> *Hypothesis 2-1: people's behaviours and attitudes on the sources of social capital affect their utilisation of online political opportunities.*
> *Hypothesis 2-2: people's behaviours and attitudes on the sources of social capital affect their perceived efficacy of online political opportunities.*

Hypothesis 3: people's motives for Internet use influence their engagement in online political opportunities.

In the same way that motives for Internet use affect the general use of the Internet, motive variables may have significant relationships on people's political use of the Internet. By testing Hypothesis 3, along with Hypothesis 2, we can answer the question, *who are using the Internet for political purposes?* As the political use of the Internet is the main subject of the research,

> *Hypothesis 3-1: people's motives for Internet use affect their utilisation of online political opportunities.*
> *Hypothesis 3-2: people's motives for Internet use affect their perceived efficacy of online political opportunities.*

Table IV-3 List of Hypotheses

Hypotheses	Sub-Hypotheses	
Hypothesis1: people's motives for Internet use influence the sources of social capital.	1-1	People's motives for Internet use influence frequency of visiting websites.
	1-2	People's motives for Internet use influence their interpersonal ties of social network.
	1-3	People's motives for Internet use influence their trust in virtual community.
Hypothesis2: people's behaviours and attitudes on the source of social capital influence their engagement in online political opportunities.	2-1	People's behaviours and attitudes on the source of social capital affect their utilization of online political opportunities.
	2-2	People's behaviours and attitudes on the source of social capital affect their perceived efficacy of online political opportunities.
Hypothesis 3: people's motives for Internet use influence their engagement in the online political opportunities.	3-1	People's motives for Internet use affect their utilisation of online political opportunities.
	3-2	People's motives for Internet user affect their perceived efficacy of online political opportunities.

4-3. the Data

I conducted the two waves of a large scale survey in 2001 and 2005, using web-based data collection as described in the previous chapter[45]. Between the two surveys, many changes occurred, for example, in the scale and composition of the Internet population, some of which are reflected in the second data set. Among those changes, while the rate of Internet users among the Korean population was 52% (about 24 million) in December 2001, the year

when the first survey was conducted, the rate increased to 70% (about 32 million) as of December 2004, a month before the second survey was carried out. The data collected in 2005 (hereafter, DATA 2005) is of importance in that it reflects some of those changes that occurred in the Korean Internet population since 2001. In addition, the second survey has the merit of an appropriate data format for structural equation modelling. However, this does not mean the first data compiled in 2001 (hereafter, DATA 2001) is less valuable than DATA 2005. DATA 2001 covers a comprehensive range of behaviours and attitudes about people's Internet use, with a coding table extending to 161 fields, providing a variety of evidence to supplement the analyses of the structural equation modelling.

4-3-1. Advantage and Disadvantage of Internet Survey

As over 862 million people worldwide had adopted the Internet (as of the end of December 2005), social scientists became enabled to take advantage of the functions provided by the medium as a tool to collect data effectively. The Internet permits an array of instrument designs, facilitating alternative question formats, various sequencing options, and audio-visual stimuli (Best and Krueger 2004). As a researcher, I could benefit from the Internet in that I could obtain data effectively as the subject of my research concerns Internet users. In other words, the concept of an Internet survey is confined in this research to a methodological instrument using the Internet as a tool for data collection[46].

An Internet survey involves several steps of work ranging from drawing samples and contacting the samples to administering instruments either on the

Internet or stand-alone computer. Throughout these procedures, an Internet survey seems to be more effective than other means, such as fax or postal mail and far cheaper and quicker to organise than face-to-face interviews. One survey showed that the fastest method was fax with an average of 4 days to respond, which is followed by web-based survey with 5.67 days to respond (Cobanoglu, Warde et al. 2000). Reported response rates were 26% for mail, 17% for fax, and 44.21% for a web-based survey[47]. The web-based survey could be made more effective with the support of e-mail; requesting samples to participate in the survey on the web. The cost of surveys based on websites and e-mail decrease significantly as the sample size increases (Watt 1999). Considering overall time and cost for the whole procedure, an Internet survey seemed to be the most cost-effective method to collect data for this investigation.

The advantages of this kind of online data collection include: firstly, the Internet is an effective medium to sample a range of population (Best and Krueger 2004). The population can be solicited through online advertisements posted on frequently used services. In addition, there are an increasing number of professional firms established in Korea, specialised in outsourcing services of online survey, in particular, in the fields of business marketing as well as academic surveys. Secondly, the Internet makes the administration of the survey process more flexible and effective; from designing and distributing questionnaires to compiling and handling the data. Its appearance, from typeface size to its colour, can be customised to the needs or preferences of respondents. Thirdly, the Internet provides researchers with a variety of options

for more effective procedures, such as pre-notifications, reminders, or incentives. Some professional groups specialising in online survey have developed methodologies to filter out casual users, for example, by checking duration time in answering each question[48]. Fourthly, the researcher can benefit from the technological flexibility of the Internet: for example, some e-mail software allows for precise tracking of e-mail surveys. After sending e-mails containing questionnaires or requesting a user to participate in a survey on the websites, researchers are able to determine the number of the e-mails that are not delivered as well as what time the e-mails are opened, replied to and deleted. These processes can improve sampling procedures (Paolo, Bonaminio et al. 2000) and data quality. People tend to provide longer open-ended responses to e-mail than to other types of surveys (Paolo, Bonaminio et al. 2000). According to some research, responses to e-mail surveys tend to be more candid than responses to mail or phone survey (Bachmann, Elfrink et al. 1999). Research conducted by a commercial company indicates that people taking a survey using the Internet are significantly more likely to say they would participate in a future study than people who take the same survey with an interviewer on the telephone[49]. In addition, such electronic forms of questionnaires can require respondents to check all the items without missing one or more, thus reducing the likelihood of missing data.

Despite such benefits the Internet can offer for data collection, it has some limitations including: firstly, Internet-applied online survey may have a problem when the survey is required to cover samples across both Internet users and non-users. Users could give up completing survey questionnaires because of

limited access to internet-capable computers, handling difficulties, or any other skill respondents need to have. The non-user problem has been avoided in my research in that its scope is confined to factors affecting active users accessing the Internet at least every five days. Secondly, an internet survey could be vulnerable to attracting ineligible cases or inducing invalid responses without appropriate measures to replicate random sampling. My research avoids this problem by sampling from the database of what they call *panels*, who accept the offer of a professional online survey firm to respond to survey questions. Thirdly, in the case of an e-mail survey, it is difficult to obtain a sample framework in which every subject in the population has an equal chance of being selected for participation (Dillman 2000). Other problems with e-mail surveys include the issues of either under or over-representation when samples change their Internet service provider and e-mail address or when they have multiple e-mail accounts. The user's capacity to operate a computer can influence the likelihood of their responding. Researchers have frequently faced a typical problem in web-based survey: one user making multiple responses. Recently, technology to detect the IP address of an Internet surfer makes it possible to bar such intentional or unintentional multiple replies.

Besides opportunities and limitations the Internet inherently has as a research tool, my research, the subject of which is related to the behaviours and attitudes of Internet users, deserves to benefit from the Internet and related technologies. The data collection for my research is supported by the data base of Internet user samples which has verified its reliability through repeated commercial market surveys. Using HTML and other programming languages, I

designed a questionnaire, every item embedded with hidden codes. A large number of responses could be obtained within a week with data relatively clean compared to other methods. Once receiving the data, I converted it into SPSS data table and then immediately carried out statistical analyses. A couple of weeks was enough to complete this, which could not have been finished within three times of that period with conventional media, such as post mail or telephone.

I conducted an experimental web-based online survey in February 2001. The experimental effort concentrated on building a website under the URL purchased for the purpose of my research (www.e-polity.net)[50], and collecting data through the website by snowball sampling method. I was able to collect data from up to 360 respondents but the properties of the data seemed not to be appropriate for research purpose because of biased demography among other reasons. I had to give up managing a website for data collection by myself. That experience taught me that an online academic survey requires specialised expertise with a realistic size of sample pool. The vision I had before this experience was that the Internet enables an individual researcher to manage all the stages of research process from designing to data collection.

In August 2001, I decided to rely on the resources that online survey firms, such as INR (Internet Research, www.inr.co.kr), have accumulated, in particular, through Internet data collection. I handed over to them the questionnaires I had designed under the contract that they took samples from their data bases of Internet users in Korea and invited the samples to their website in which they

could complete the online questionnaire[51]. The first survey in the year of 2001 covered a comprehensive range of research issues from people's online behaviour to their trust in off-line society and to offline associational lives. The survey incorporated a large number of questions covering both peop le's online and offline life, with the aim of generating data for a comparative analysis of differences in people's attitudes and behaviours between offline and online worlds.

In January 2005 I conducted the second survey. In particular, all the questions were designed to measure variables on the seven-point Likert scale, which would fit the structural equation model. I contracted with INR for the second survey, which used the questionnaire modified appropriately for the structural equation modelling.

INR distributed e-mails to 1000 samples selected from the pool of their data base, requesting them to participate in the survey. According to them, their system imposed respondents to check all the items of questionnaires without missing any one and excluded automatically some data that were submitted much too quickly under the standard duration. INR collected responses from 750 samples and chose 742 for the analysis. Since probabilistic sampling procedure was applied to draw the survey sample, survey data was distributed as the population demographical characteristics with a little bias. The margin of sampling error of this survey was 3.1% with 95% confidence interval.

In sum, these procedures generated two sets of data for the examination of Korean people's Internet usage for both general and political purposes:

- The primary dataset, collected in 2005, has been mainly used in the core model to carry out confirmatory factor analyses and path analysis, in which explanatory and dependant variables are linked together.

- An additional dataset, collected in the first survey in 2001, is useful for supplementary data analyses in which some online factors are connected with offline variables, explaining more contextual relationships affecting online variables.

4-3-2. Data Characteristics

Age

Among the changes in the profile of the Korean Internet population, we need to note that it has become distributed more evenly across the generations as an increasing number of the over sixties are using the Internet as indicated in Table IV-4 showing the rate of Internet population by age group. One might conjecture that more older people using the Internet contributes to the construction of social capital, as more people from what has been called the 'civic generation' (Putnam 2000; Shah and Kwak 2001) join cyberspace. The idea that online social capital should be understood in different ways from the offline world is contested, however.

Table IV-4 Korean Internet Users by Age (%)

	December 2001 Overall User rate: 56.6% (about 23 million)	December 2004 Overall User rate: 70.2% (about 32 million)
20s	84.6	97.9
30s	61.6	91.0
40s	35.6	68.7
50s	14.9	35.7
Older than 60	3.3	11.9

Source: National Internet Development Agency (NIDA)

The broadening of the Internet across the age range is reflected in DATA 2005: while the samples of older than 40 comprise 6.9% in DATA 2001, these age groups are 10.6% in DATA 2005. With DATA 2005, it is expected that more member of the civic generation went online and took their position in the virtual community. Table IV-5 shows that age groups in DATA 2005 are more distributed evenly compared to DATA 2001.

Table IV-5 Age Group Distribution in DATA 2001 and DATA 2005

	2001 data		2005 data	
	Freq.	%	Freq.	%
Younger than 24	312	27.1	155	20.9
25~29	362	31.5	203	27.4
30~34	276	24.0	197	26.5
35~39	121	10.5	108	14.6
40~49	71	6.2	64	8.6
Older than 50	8	0.7	15	2.0
Total	1150		742	

The proportion of Internet population by age groups (National Internet Development Agency 2006): 27% for the group of teens; 20% for the group of 20s; 30% for the group of 30s, 19% for the group of 40s; and 11% for the group of older than 50

Gender

Woman may be slightly overrepresented[52] in the two data sets, as shown in Table IV-5, using data of the National Internet Development Agency (NIDA) which indicates that a male bias among Internet population (63% male and 50.2% female in December 2001; 75.9% for male and 64.6% for female in December 2004). Despite the reversed gender proportions, I used the data set as they are, upon the judgement that little tangible differences[53] in behaviours are detectable between female and male Internet users and most of research issues are not especially sensitive to gender variables.

Table IV-6 Gender Distribution in DATA 2001 and DATA 2005

Gender	DATA 2001		DATA 2005		Population*
	Freq.	%	Freq.	%	
Female	602	52.3	373	50.3	46%
Male	548	47.7	369	49.7	54%
N	1150		742		

** National Internet Development Agency (2006)*

Region

Thirdly, it may be necessary to note the geographical background of respondents: their home town (where they come from) and residential place (where they live now). The questionnaires asked respondents to click relevant items of home town and residential place in a list of geographical designations. South Korea has a capital metropolitan-city, 9 *Do* (which corresponds to provinces), and 5 *Si* (referring to local metro-cities). The capital city, Seoul, a surrounding province (*Kyunggi-Do*) and a satellite local metro city (*Inchon-Si*) provides working places and residences for 22.8 million, which is almost half (48.2%) of the whole population of Korea, 47.3 million (as of November, 2005, according to the National Statistics Agency). This region is referred to as the Capital City Area, where government organisations and business companies are densely located with a highly developed infrastructure of communication and transportation systems. Other local metro cities have become much more urbanised under a series of government policies for the decentralisation of national resources over past several years. Provinces, however, which include more rural areas, seem to lag behind in the infrastructure of communication and transportation compared to the capital city area and local metro-cities.

I assumed that data from respondents on geographical units would not offer meaningful information but there may be important findings by classifying the units into the three types of areas, capital city area, local metro-cities, and local area. Younger generations born in local areas tend to move to the capital metro-city for better education and jobs, leaving their parents behind in rural areas in many cases. A large part of the population in local provinces seems to be older and lower-income. Unlike people born in metro-cities, those who have moved from local provinces seem to retain local ties, for example, with associations of old buddies who share memories on life in their rural home villages. Particularly, most Korean people show clear attachment to associations of alumni[54] and their old hometown.

Chart IV-2 Three Categories of Geographic Background in Korea

Capital metro
Local metro
Local Province

Table IV-7 Geographical Distribution of DATA 2001 and DATA 2005

	2001 Data				2005 Data			
	Hometown		Residence		Hometown		Residence	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Capital metro	445	38.7	653	56.8	302	40.7	422	56.9
Local metro	305	26.5	315	27.4	161	21.7	172	23.2
Local Province	400	34.8	182	15.8	279	37.6	148	19.9
N	1150		1150		742		742	

The proportion of Internet population by region: 52% for the capital metro city; 20% for local metro city; and 28% for local province

Table IV-7 shows that the number of respondents living in the capital metro-city is substantially greater than those who were born in the same city. That means that a large part of the population living in the capital metro-city come from rural areas. It is said that such migrants are more active in associational life than those who were born and educated in the capital metro-city.

Education

Educational background could have significance in explaining the behaviours of Internet users in relation to internet literacy. In general, one may assume that the higher the level of individuals' educational attainment is, the lower that of their engagement in online activities. That is not the case, at least, in Korea. Due to government policies to expand universal information services, which include the installation of as many access points as business opportunity can attract investments, education programs for how-to-use-the Internet have been available not only inside school and university but also for the general public.

Table IV-8 Educational Background in 2001 Data and 2005 Data (Years of formal education)

	2001 data		2005 data		
	Freq.	%	Freq.	%	
Under High-school	152	13.2	3	0.4	Under Middle-school
			83	11.2	High-school graduate
Undergraduate	804	69.9	562	75.7	Undergraduate
Higher degree	194	16.9	94	12.7	Higher degree
N	1150		742		N

I measured educational background in terms of three categories in 2001 but four categories in 2005. I separated the Under High-school group into two sub-groups in 2005: the High-school graduate and the Under Middle-school.

Although the number of cases for Under Middle-school is too small, they show that respondents who belong to the group score higher than other groups in interpersonal ties, both strong and weak ties.

Income

Even though digital utilisation by Koreans is not stratified in terms of income level (KRNIC 2002), the variable of income level may still have significant implications. There is difference in the measurement units of income level in the two surveys. In the following Table IV-9, the 'No income' group in DATA 2001 included university students as well as the unemployed. The variable of income level represented in Internet survey does not only represent socio-economic

status but also the effect of income-increase by age. In other words, the behaviours of low income groups may not be necessarily associated with those of low social classes.

Table IV-9 Income level in 2001 Data and 2005 Data

	2001 data		2005 data		
	Freq.	%	Freq.	%	
No income	383	33.3	181	24.4	Less than $990
Less than $1500	300	26.1	243	32.7	$1000~$1990
$1501~$2500	125	10.9	175	23.6	$2000~$2990
$2501~$3500	45	3.9	80	10.8	$3000~$3990
$3501~$4500	20	1.7	38	5.1	$4000~$4990
More than $4501	277	24.1	25	3.4	More than $5000
N	1150		742		

The examination of the distribution of income level by other variables shows consistent patterns, which may be worthy of discussion later in this chapter: people in middle income groups, around $2501~$3500 in DATA 2001 and $3000~$3990 in DATA 2005, are more likely to be dominated by social needs and to engage actively in online political opportunity[55].

4-4. the Structural Equation Model

4-4-1. Two-Step Approach

Structural equation modelling (SEM) is a statistical methodology that takes a confirmatory approach, such as hypothesis-testing, to the analysis of a structural theory bearing on some phenomenon. Typically, this theory represents "causal" processes that generate observations on multiple variables (Bentler 1999). The term *structural equation modelling* conveys two important aspects of the procedure: (a) that the causal processes under study are

represented by a series of structural equations, and (b) that these structural relations can be modelled pictorially to enable a clearer conceptualisation of the theory under study. The hypothesised model can then be tested statistically in a simultaneous analysis of the entire system of variables to determine the extent to which it is consistent with the data. If the goodness of fit is adequate, the model argues for the plausibility of postulated relations among variables; if it is inadequate, the tenability of such relations is rejected.

Some characteristics of SEM may be distinguished from other statistical methods, such as ANOVA or regression model. Firstly, as noted earlier, it takes a confirmatory, rather than an exploratory, approach to the data analysis. Furthermore, by demanding that the pattern of inter-variable relations be specified a priori, SEM may offer an effective solution to the analysis of data for inferential purposes. By contrast, most other multivariate procedures are essentially descriptive by nature, so that hypothesis testing is difficult, if not impossible (Kline 2005). Secondly, although traditional multivariate procedures are incapable of either assessing or correcting for measurement error, SEM provides explicit estimates of these error variance parameters. Indeed, alternative methods , such as those rooted in regression or the general linear model, assume that errors in the explanatory variables vanish (Byrne 2001). Thus, applying those methods when there is error in the explanatory variables is tantamount to ignoring error, which may lead to serious inaccuracies—especially when the errors are sizeable. Such mistakes are avoided when corresponding SEM analyses in simple terms are used (Byrne 2001). In other word, SEM requires researchers to think carefully about their data and to

venture hypotheses regarding each variable (Hoyle 1995). Third, those methods using SEM procedures can incorporate both unobserved and observed variables, contrary to an older generation of methods which use observed measurement only (Byrne 2001). Finally, there are no widely and easily applied alternative methods for modelling multivariate relations, or for estimating point and/or interval indirect effects, than SEM methodology (Byrne 2001).

I used AMOS™ 6.0 for the analysis of SEM, which is the up-to-date version of the application and provides a variety of new features. I confined the usage of the software to a classical procedure of analyses: confirmatory factor analysis (CFA), path analysis (PA), and hypothesis testing. However, such a seemingly simple procedure required a lengthy and complicated tasks, ranging from model specification and identification to model-fitness test, according to a set of standard steps recommended for SEM analysis (Hoyle 1995; Byrne 2001; Kline 2005).

Firstly, to specify the model is central in the SEM (Hoyle 1995), which means that a researcher's hypotheses are expressed in the form of a structural equation model. In the previous section of this chapter, I have already presented the conceptual drawing of the model describing observed or latent variables and the relationship between the variables, which corresponds with the step for the specification of the model. In specifying the model, a simplified scenario of Internet influence is described by a series of propositions regarding people's motivation, behaviours and attitudes: starting from people's choice of

the medium and adoption of its usage, to developing habitual and patterned usages of the medium which constitute a favourable condition under which social capital is most likely be created at the individual and collective level, and to people's engagement in political opportunities.

Secondly, specifying the model is critical for confirming that it is theoretically possible for computer to derive a unique estimate of every model parameter. Different types of structural equation models must meet certain requirements in order to be identified (Kline 2005). The second survey in 2005 and the step-modelling were carried out in an effort to identify an appropriate model as explained below in my research.

Thirdly, after selecting measures of the variables represented in the model, the next task is to operate a computer program to estimate the model. This step includes the evaluation of model fitness, the interpretation of parameter estimates, and the consideration of equivalent models, which offer competing accounts of the data by explaining given data in terms of a different configuration of hypothesised relations as well as the prepared one of researcher's preferred model. Among those tasks, testing model fitness seems to be most important. There are many indexes developed for the evaluation of model fitness to assess the degree of congruence between the model and data (Hoyle 1995): these include among others Chi-square (χ^2); Normal Fit Index (NFI); Root Mean Square Index (RMSEA); Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI).

GFI (Goodness-of-Fit Index) represents the degree to which a target model can

explain the total covariance of samples, the value of which is between 0 and 1: the greater the value, the more the model will be favoured. The index for GFI was 0.998 while that for AGFI was 0.996, confirming that the model was suitable for SEM. In evaluation of my SEM model, however, I decided to exclude one variable, *frequency of posting messages*, which at the initial stage I regarded as an effective variable to track respondents' eagerness and activeness in virtual community life but which turned out to be too problematic for statistical analysis.

In the course of research, the stage of model identification took a greater amount of time, compared to other stages involving a huge amount of trial-and-error until an adequate model came up. Firstly, DATA 2001 was unsuitable for analysis by SEM: key variables were not continuous or linear, which is critical to SEM in general. Secondly, I had a problem with the dataset from the second survey I conducted in 2005 with the same variables but scored differently in a way appropriate for SEM. I could not identify an integrated single model incorporating all the 45 observed and latent variables. The problem was low scores in goodness-of-fit test, which occurred by squeezing too many variables and relations into a single model (Anderson and Gerbing 1988; Kline 2005). Experts on statistics advised me to adopt *two-step approach* (Anderson and Gerbing 1988; Fullerton 2005): confirmatory factor analysis first and then path analysis.

The structural equation modelling (SEM) is composed of a *structural model* and a *measurement model*: while the former defines relations among the

unobserved or latent variables, specifying the manner by which particular latent variables directly or indirectly influence changes in the values of other latent variables in the model, the latter defines relations between the observed and unobserved variables, providing the link between scores on a measuring instrument (the observed indicator variables) and the underlying constructs they are designed to measure (the unobserved latent variables). The measurement model may represent the confirmatory factor analysis (CFA) in that it specifies the pattern by which each measure loads on a particular factor. Contrary to the exploratory factor analysis (EFA) which is designed for the situation where links between the observed and latent variables are unknown or uncertain, CFA is appropriately used if a researcher has some knowledge of the underlying latent variable structure.

In the initial stage of model identification, the fact that the model included too many variables and relations was problematic, among other things, because of low goodness-of-fit of the model caused by this complexity. Following established practices (Anderson and Gerbing 1988; Fullerton 2005) and some advice from experts,[56] I divided the specified conceptual model into two separate but sequential models: *a measurement model* and a *structural model*. The CFA, a form of measurement model, is intended to draw latent variables explaining 45 observed variables. The latent variables will construct a structural model describing the paths of effects that independent variables have on dependent variables.

4-4-2. the Measurement Model: Confirmatory Factor Analysis (CFA)

The research model is composed of two measured variables and eight latent variables. CFA is conducted to assess the properties of the latent variables mostly in terms of factor loading value. The CFA is expected to produce three groups of latent variables: (a) three motive variables categorising Internet users' motives why they adopt the medium; (b) three latent variables representing the modes of individuals' general Internet usages, which constitute a set of conditions under which social capital is likely to be created; and (c) two variables of utilisation and efficacy of online political opportunity.

DATA 2005 was subjected to a confirmatory factor analysis using the AMOS 7.0, Structural Equation Modelling software. The confirmatory factor analysis was completed with maximum likelihood estimation[57]. Chart IV-4 is drawn using AMOS Graphic, showing eight latent variables associated with 35 observed variables. The relationships between latent and observed variables, drawn from the exploratory factor analysis, are applied to this CFA, in which covariance between the latent variables are examined.

The internal consistency for key variables is measured by Cronbach alpha and summarized in Table IV-10, which shows that all but one variable within the key variable met or exceeded the 0.75 test score which is widely regarded as a benchmark for reliability with this coefficient.

Table IV-10 Reliability of the Key Variables

Variable	Cronbach α (coefficient rounded to two decimal places)
Motives	
Informational needs	.84
Social needs	.84
Emotional needs	.68
Interpersonal Ties	
Strong ties	.80
Weak ties	.79
Trust in Virtual Community	.75
Utilisation	.75
Efficacy	.84

The results of the CFA are summarised in Table IV-11, with loading values (λ) for regression of observed variables on exogenous context, path coefficients (γ) for regression of endogenous context on exogenous context, and coding names of observed variables. The goodness of fit statistics for the suggested model in Chart IV-4 is as follows: GFI of 0.998, and AGFI of 0.986. It robust results indicating that the model is statistically valid. The individual t-test value for the significance of path coefficients and loadings are greater than the critical value of 2, which also shows our model is valid. Most of the observed variables have substantial factor loadings on latent values (λ>0.35), which mean that the observed variables within the model have reliable explanatory power for the latent variables.

Chart IV-3 Confirmatory Factor Analysis

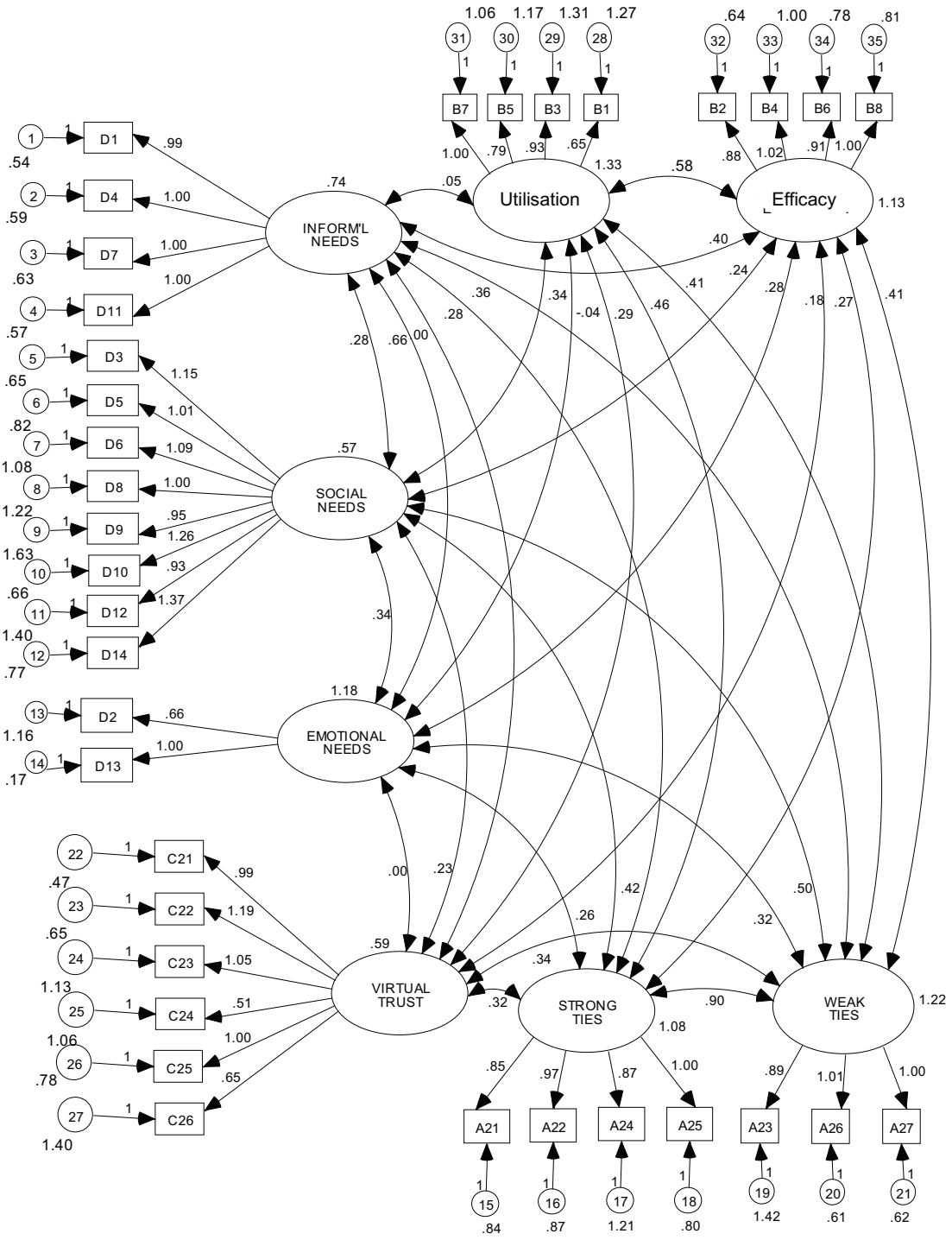


Table IV-11 Standard Estimates of Observed and Latent Variables

(λ / γ = factor loadings)

Variables	Var.	λ / γ
Social needs		
I use the Internet to meet like-minded people.	D3	0.73
I use the Internet to exchange ideas and information with others.	D5	0.64
I use the Internet to persuade others to join me.	D6	0.62
I use the Internet to ask others for help.	D8	0.56
I use the Internet to get out of the boring reality of this world.	D9	0.49
I use the Internet to maintain good relationships with others.	D10	0.76
I use the Internet to control resources remotely.	D12	0.51
I use the Internet to have conversations with many people.	D14	0.76
Informational needs		
I use the Internet to obtain useful information.	D1	0.76
I use the Internet to get up-to-date news.	D4	0.75
I use the Internet to learn new things.	D7	0.73
I use the Internet to make daily life more convenient.	D11	0.75
Emotional needs		
I mainly use the Internet to pass the time.	D2	0.55
I mainly use the Internet for entertainment.	D13	0.93
Strong ties		
As I use the Internet, I become closer to the people I know.	A21	0.69
As I use the Internet, I can get in touch with people I have lost contact with.	A22	0.73
As I use the Internet, I can talk more often with my family.	A24	0.64
As I use the Internet, I can get more involved with clubs and societies.	A25	0.76
Weak ties		
As I use the Internet, I get to know new people.	A23	0.64
As I use the Internet, I can meet someone who may be able to help me.	A26	0.82
As I use the Internet, I can meet people from different backgrounds	A27	0.81
Trust in virtual community		
People I meet online are truthful.	C21	0.74
In general, people using the internet seem to act responsibly.	C22	0.75
Few people use the internet with indecent motives.	C23	0.60
Some people online provide useful advice.	C24	0.36
Most people online seem to behave reasonably.	C25	0.65
I have never thought I am being monitored.	C26	0.39
Utilisation of online political opportunity		
How often do you access political information?	B1	0.56
How often do you send your opinion to a politician or policy-makers?	B3	0.68
How often do you request online delivery of public service?	B5	0.64
How often do you participate in online collective actions?	B7	0.75
Efficacy of online political opportunity		
Availability of political information contributes to democracy?	B2	0.76
Direct contact with politician contributes to democracy?	B4	0.74
Online public service contributes to the innovation of administration?	B6	0.74
Easy mobilisation of collective actions contributes to democracy?	B8	0.76

4-4-3. the Structural Model: Path Analysis (PA)

It is the core part of the model to examine the influence of motive variables on social capital creating conditions and online opportunities and to identify the relationships of social capital creating conditions with online opportunities, all of which are expressed in hypotheses. The presumption is that while emotional needs may be less likely to contribute to the creation of social capital, the other two needs are positively related to the favourable conditions for the creation of social capital. I will focus on the relationship of emotional needs with entertainment websites, which shows that Internet users who are dominated by emotional needs are less likely to use the Internet in a way to create social capital.

In fact, this model is designed to prove that Internet use itself affects the creation of social capital: every person has a different outcome from Internet use in the perspective of social capital. In that regard, the main focus will be put on the difference between those Internet users who are motivated by informational and social needs and those who use the Internet for emotional needs: the former group is more likely to build and appropriate the social resources of social capital, compared to the latter.

However, there may be a twist in the result of the analyses: findings on the difference between informational and social needs. Although those two variables are believed to contribute to the creation of social capital, each variable is related to the variables of social ties and online political opportunity engagement in different ways.

The structural model is composed of three clusters of variables: Cluster 1 for motive variables; Cluster 2 for the variables of the sources of social capital creating conditions; and Cluster 3 for the variables of engagement in online political opportunity. Variables in Cluster 1 are informational needs, social needs, and emotional needs, all of which are regarded as exogenous variables in this model. Cluster II incorporates three latent variables and two measured ones: latent variables are strong ties, weak ties, and trust in online community, which are drawn from CFA; measured variables are frequencies of visiting public websites and of entertainment websites. Variables in Cluster III represent the way in which people engage in online political opportunities. By putting 10 variables in total into AMOS™7.0, I will test the hypotheses just presented.

Table IV-12 shows the matrix of correlations between variables: most of the relationships display moderate positive association, though some correlations are rather weak. In particular, the relations between motive variables (‘social’, ‘inform’ and ‘emotion’) are moderately strong, suggesting that even emotional needs have significant correlation values with other two motive variables.

Table IV-12 Pearson Partial Correlation Coefficients of Variables

	Social	Inform	Emotion	Public	Enter	Strong	Weak	Trust	Utilise	Efficacy
Social	1									
Inform	.37**	1								
Emotion	.53**	.34**	1							
Public	.09*	.07*	.01	1						
Enter	.09*	.03	.10**	.10**	1					
Strong	.25**	.40**	.19**	-.00	.02	1				
Weak	.31**	.48**	.22**	.01	.07	.64**	1			
Trust	.05	.31**	.05	.03	-.00	.32**	.34**	1		
Utilise	.06	.33**	-.03	.20**	-.02	.30**	.25**	.23**	1	
Efficacy	.36**	.25**	.20**	.13**	-.02	.19**	.26**	.20**	. 40**	1

Significant at * p<.05 and ** p<.01
Social: Social needs; Inform: Informational needs; Emotion: Emotional needs; Public: Public website; Enter: Entertainment website; Strong: Strong ties; Weak: Weak ties; Trust: Virtual trust; Utilise: Utilisation; Efficacy: Efficacy

The direction of paths in this model is that variables in the cluster 1 affect those in the cluster 2, and variables in the cluster 1 and 2 affect those in the cluster 3. That is, individuals' behaviours and attitudes on the sources of social capital in the three dimensions are modified by motives, and then their behaviours and attitudes on the Internet and motives have effect on their engagement in political opportunities.

The theoretical review provided a set of conditions under which social capital is most likely to be created. The model incorporates some possible sources of social capital at the cognitive, relational and structural dimensions, which are related with people's behaviours and attitudes on the Internet.

Firstly, the variables of motives for Internet use are set up as exogenous ones.

In theory and practice a variety of factors and causes are involved in the development of different motives but they are beyond the scope of this research. The three factors with similar loadings are drawn from my two surveys based on the questionnaires using the same wordings, which provides stability for the factors as explanatory variables. The relatively high level of significance in the co-relationships between the independent variables may be a merit in explaining dependant variables.

Secondly, the sources of social capital as a set of condition under which social capital is most likely to be created and stored are expressed by the five variables at the three dimensions. The variable of frequency in visiting public websites is established as the source of social capital at the cognitive dimension in that it may represent individuals' interest and activeness in obtaining information about public and political issues in an explicit way. However, it must be noted that the means of measurement may not be satisfactory enough to cover effectively the aspect of users' attitudes toward political information. In fact, there may be many other channels, such as portal sites (Yahoo or Naver) or news sites (Guardian in the UK or Chosun Daily in Korea), which deliver a variety of political information to Internet users. Nevertheless, my survey focuses on one overt indicator which can be detected from those Internet users who are serious about political information and public issues, even if it may not be powerful enough to represent the entirety of such people.

It is expected that the two variables of interpersonal ties at the relational

dimension may show different properties of strong and weak ties and connect them to bonding and bridging social capital respectively. However, before designating two factors in the course of factor analysis I was able to identify just one factor, which implies that weak ties predominantly influence Internet users' interpersonal relationships. However, the model defines two different variables at the relational dimension to clarify different propensities in social networks through the Internet.

Initially, I considered two variables to represent online sources of social capital at the structural dimension: *frequency* of visiting online community and *trust* in the community. However, all the members of cyber community do not necessarily participate with a sense of community in discussion or other types of activities. Some countries including Korea seem to be determined to impose restrictions on inappropriate messages at the sacrifice of freedom of expression. I used only trust in online community for the variable of social capital source at the structural dimension, on the basis that such an individual attitude probably derives from collective conception of social structure among the members of a society.

Thirdly, for the analysis of Internet impact on political process, I sought to focus on behavioural and attitudinal aspects of individuals as actors in political process. I set up four factors representing important changes the Internet has driven onto the political system and environment: access to political information, contact with political leaders, supply of public service, and mobilisation of collective action. Such changes offer new political opportunities to individuals,

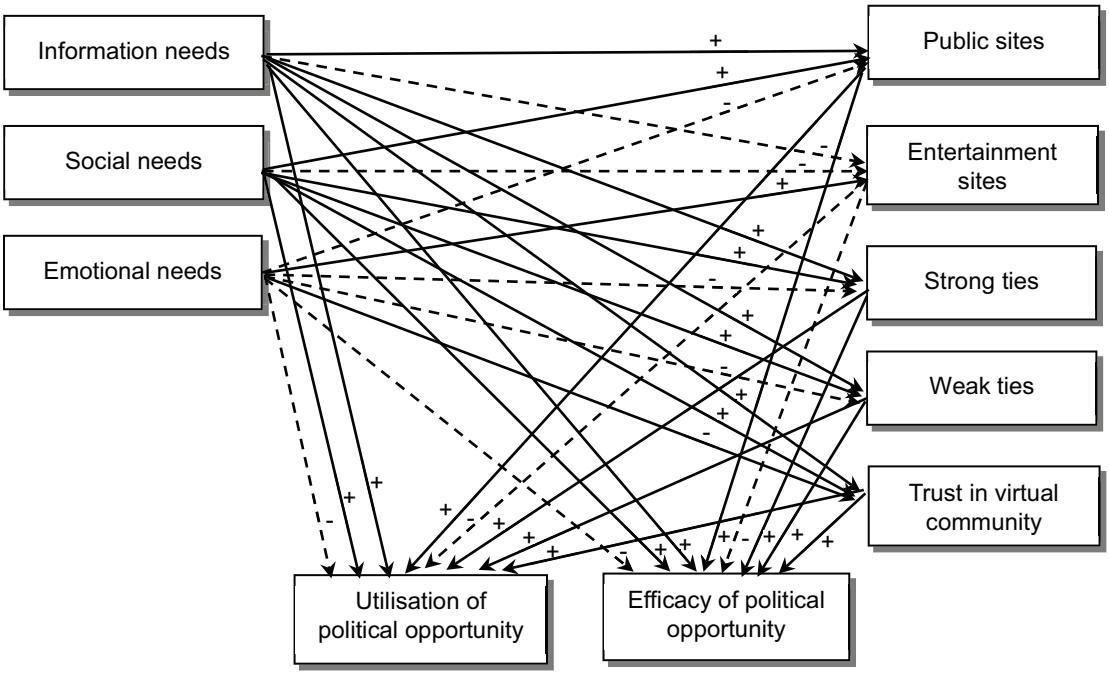
which may be quite different from traditional offline ones. Initially, I shed light on the three forms of engagement in the opportunities at individual level: awareness, practice and evaluation. With the increase in Internet penetration, most Internet users have become aware of such new political opportunities, arguably making the awareness of the opportunities less significant. The model has only two variables for individual engagement in online political opportunities: *utilisation* and *efficacy* of such opportunities.

- The variable of *utilisation* represents individuals' experience and activeness for using online political opportunities to access political information, pursue contact with political leaders, consume public services, and mobilise for collective actions.

- The variable of *efficacy* represents how far individuals evaluate the opportunities to be effective in making changes in the political process. That is, the variable measures the degree to which an individual Internet user believes in the power she or he can exert in making democratic process work better.

Before discussing the use of AMOS for path analysis, it may be useful to review the direction of influence between variables. I assume that the variable of emotional needs has negative influence on the source of social capital but positive impact on entertainment sites, which is included as a counter variable of social capital condition at the cognitive dimension. In addition, the entertainment sites and emotional needs may not be contributory to engagement in online political opportunities.

Chart IV-4 Directions of Relationships



Blocked arrows indicate the directions of influence, solid arrow lines stand for path with positive value, and dotted line for path with negative value

Chart IV-5 Path Analysis

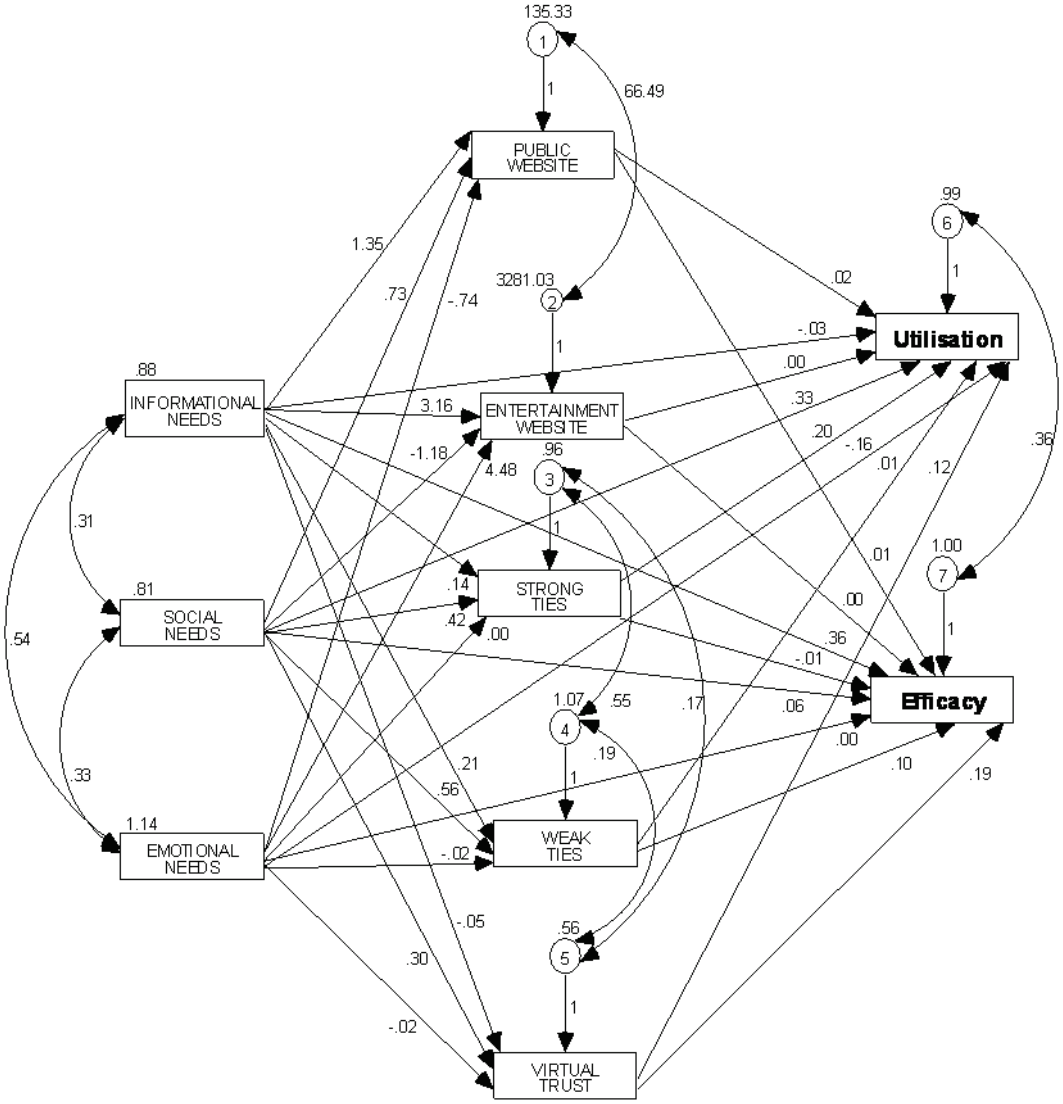


Chart IV-6, which was produced by the AMOS and may be a key diagram with which all the hypotheses are tested, confirms conceptualised paths in Chart IV-5. The values in Chart IV-6 are path coefficient before standardisation. The Unstandardized estimates for different variables cannot be directly compared with each other. Table IV-13 shows standardised estimates and t-values. When the t-value, which is drawn by dividing unstandardized value with standard error, is larger than 1.645, the value can be said to be statistically significant at the 0.05 level, explaining causal effect between variables concerned (Kline 2005).

Table IV-13 Standardized Regression Path Coefficients

Dependent variable		*exploratory*	*β*	*t-value*
PUBLICWE	<--	INFORM	0.108	2.44*
PUBLICWE	<--	SOCIAL	0.056	1.41
PUBLICWE	<--	EMOTION	-0.068	1.54
ENTERTAI	<--	INFORM	0.051	1.16
ENTERTAI	<--	EMOTION	0.083	1.89
ENTERTAI	<--	SOCIAL	-0.018	0.46
STRONG	<--	INFORM	0.121	2.91**
STRONG	<--	SOCIAL	0.356	9.71**
STRONG	<--	EMOTION	-0.001	0.01
WEAK	<--	INFORM	0.210	4.27**
WEAK	<--	SOCIAL	0.561	12.2**
WEAK	<--	EMOTION	-0.019	0.44
TRUST	<--	INFORM	-0.052	1.46
TRUST	<--	SOCIAL	0.305	9.13**
TRUST	<--	EMOTION	-0.024	0.79
UTILISATION	<--	INFORM	-0.011	0.61
UTILISATION	<--	SOCIAL	1.317	6.56**
UTILISATION	<--	EMOTION	-0.625	3.76**
UTILISATION	<--	PUBLICWE	0.072	5.69**
UTILISATION	<--	ENTERTAI	-0.002	0.94
UTILISATION	<--	STRONG	0.802	4.44**
UTILISATION	<--	WEAK	0.030	0.18
UTILISATION	<--	TRUST	0.475	2.33**
EFFCACY	<--	INFORM	1.435	7.33***
EFFCACY	<--	SOCIAL	0.241	1.19
EFFCACY	<--	EMOTION	-0.011	0.07
EFFCACY	<--	PUBLICWE	0.038	2.95**
EFFCACY	<--	ENTERTAI	-0.005	2.00*
EFFCACY	<--	STRONG	-0.053	0.29
EFFCACY	<--	WEAK	0.403	2.33*
EFFCACY	<--	TRUST	0.753	3.66**

*: 5% significant level / ** : 1% significant level

4-4-4. Hypothesis Test

The political anatomy of Internet users is aimed at understanding systematically the behaviour of Internet users as political participants. Based on the use and gratification theory, firstly, internal motives are expected to explain explicit behaviours of Internet users: what internal factors are behind their ways of using the medium so as to create social capital? If there are significant relationships existing between the explanatory variables and social capital sources, can the motive variables explain also Internet users' behaviour and attitudes on political participations? Furthermore, I assumed that the patterns of general Internet usage may be applicable to political use of the Internet. That is, those who use the Internet so as to create social capital may be active and positive on the political use of the Internet. I have so far described such connections as causal relationships between the sources of social capital and engagement in online political opportunities.

I have set three hypotheses to demonstrate the causal relationships between the three groups of variables;

> *Hypothesis 1: people's motives for Internet use influence the sources of social capital.*
>
> *Hypothesis 2: people's behaviours and attitude on the sources of social capital influence their engagement in online political opportunities.*
>
> *Hypothesis 3: people's motives for Internet use influence their engagement in online political opportunities.*

Who is using the Internet to create social capital?

Hypotheses 1 is intended to identify causal relationships between people's motives for Internet use and the modes of their general Internet usages as the sources of social capital. Theoretically, two motives of informational and social needs are believed to be positive in the creation of social capital by affecting the frequency of visiting public websites, interpersonal ties of social network, and trust in online community. In contrast, the motive of emotional needs has no influence or even a negative impact on the creation of social capital through two effects: positive relationship with the frequency of visiting entertainment websites and negative relationship with the variables related to favourable condition for social capital creation. Therefore, Hypothesis 1 will be regarded as adopted, almost regardless of the values in relationships between emotional needs and dependant variables.

Hypothesis 1-1, people's *motives for Internet use influence frequency of visiting websites*, is adopted. As expected, the variable of *emotional needs* has no significant effect on the *frequency* of visiting public websites (β = -0.068, t = 1.54). The insignificance in the path from social needs to the public websites (β = 0.06 t=1.42) is explicable in that no Internet user is expected to visit the public website for social networking. On the contrary, informational needs (β = 0.11 t=2.44) show high significance in the path with the public websites, which demonstrably meets the condition under which social capital is most likely to be created. By contrast, the motive of emotional needs has a positive impact on entertainment sites (β=0.83, t=1.89). To sum up, peoples' motives for Internet

use influence their behaviours on visiting websites.

Hypothesis 1-2, *peoples' motives for Internet use influence their interpersonal ties of social network*, is adopted. The negative role of *emotional needs* in the creation of social capital is repeated, but not significant, in the path with *strong ties* (β = -0.001, t= -0.01) and *weak ties* (β=-0.052, t=-0.440). On the contrary, social and informational needs have positive value in the path with the two variables of interpersonal ties. The comparison of the different values between the paths with strong ties and weak ties suggest more details: social needs and informational needs show higher values in relation with weak ties (β = 0.56, t = 12.2; β=0.21, t=4.27, highly significant) than in relation with strong ties (β=0.36 t=9.73, β=0.12, t=2.97, highly significant). By adopting the hypotheses 1-2, the model demonstrates that social and informational needs are productive in the creation of social capital at the relational dimension.

Hypothesis 1-3, *peoples' motives for Internet use influence their trust in virtual community*, is adopted by confirming positive significant values in the paths from social needs (β=0.35, t=9.13). In this path, information needs and emotional needs show negative relationship with the key factor, trust, of social capital (β=-0.05, t= -1.46; β=-0.02, t=-0.79, respectively), but both are not significant.

As asserted in the theoretical review, hypothesis tests suggest that different usage of the Internet may result in different outcomes in the creation of social capital. Even though some subscribe to the argument that the Internet alienates users from social networks or community activities (Kraut, Lundmark et al. 1998;

Nie 2001), it is argued here that the Internet exerts significant impact on individuals and society so as to create social capital. With the result of the hypothesis testing confirming that some motives for Internet use are productive in the creation of social capital, we cannot deny the contributory effect of Internet use on social capital.

If the modes are formulated as patterned and habitual usage of the medium, it may be possible to predict who becomes rich in social capital. The research model was set up based on the condition that those Internet users regularly visiting public websites, and/or building strong and weak interpersonal ties, and more trusting in virtual communities are more likely to be rich in social capital than those users mainly visiting entertainment websites. The model asks what internal factors of Internet users are associated with these social capital creating conditions. Hypothesis test suggests that those Internet users dominated by social or informational needs are more likely to create and manage social capital in the course of daily use.

Who is using the Internet for political purposes?

The model assumed that there are two paths through which Internet influence is transmitted to engagement in online political opportunity: (a) influence paths from motive directly to engagement in political opportunity; and (b) influence paths from the motive to the engagement via the source of social capital. While Hypothesis 2 describes the latter path, Hypothesis 3 deals with the former one. Dependent variables represent *activeness* in utilisation of online political opportunities and *positiveness* in assessing the opportunities.

In the paths from sources of social capital to two variables of engagement in political opportunities, Hypothesis 2*, people's behaviours and attitude on the sources of social capital influence their engagement in online political opportunities*, can be said to be adopted with the positive values of some variables. Frequency of visiting websites, whether the public sites or the entertainment sites, may have either positive or negative impact on people's engagement in the online political opportunity. In relation to Hypothesis 2-1 dealing with the path concerned with *utilisation* of political opportunities, frequency of visiting the public sites shows a positive value (β=0.19, t=5.69), while frequency of visiting entertainment sites consistently suggests a negative value (β = -0.03, t = - 0.95, not significant). In relation to Hypothesis 2-2, concerning the relationship with *efficacy* of political opportunities, while *frequency* of visiting the public sites shows positive value (β=0.10, t=2.95), that of visiting the entertainment sites offers a negative one (β = -0.005, t = -2.007). Frequency of visiting the public sites has more impact on the efficacy of political opportunities than that of visiting the entertainment sites.

In the path from the strength of people's online social ties to their engagement in online political opportunity, unexpected outcomes are detected. In short, causal relationships are found in the paths between *strong ties* and *utilisation* of political opportunities (β=0.802, t=4.44) and between *weak ties* and *efficacy* of political opportunities (β=0.403, t=2.33). Negative values are shown in relationship between *strong ties* and *efficacy* of political opportunity (β=-0.053, t=-0.292) and between *weak ties* and *utilisation* of political opportunity (β=0.03, t=0.18), but neither is statistically significant. These unexpected findings may

require more supporting evidence in order to be convincingly explained and generalised to other cases, which seems to be a limitation in my research, but I will make an attempt to interpret them in the next chapter.

The positive causal relationship between people's trust in virtual community and their engagement is strongly confirmed: the path between trust in virtual community and utilisation of political opportunity shows positive value (β=0.475, t=2.33); and the path between trust in virtual community and efficacy of political opportunity is also positive (β=0.753, t=3.66). Trust in virtual community has more impact on utilisation than on efficacy.

Hypothesis 3, *people's motives for Internet use influence their engagement in online political opportunities*, is also adopted. Even though negative influence of *emotional needs* is significantly confirmed in the path with *utilisation* variable (β = -0.625, t = -3.76), it shows no impact in the path with *efficacy* variable (β = -0.011, t = 0.07). At the stage of designing the model, I assumed that those Internet users who use the medium for passing time or entertaining themselves keep away from opportunities for political engagement.

Another unexpected finding is confirmed in relationships between two productive motive factors, social and informational needs, and the two variables of political opportunity engagement. Causal relationships are detected in the path from social needs and emotional needs to *utilisation* of political opportunity (β = 1.32, t = 6.56; β = -0.63, t = 3.76) and in the path from *informational needs* to *efficacy* of political opportunity (β = 1.44, t = 7.33). No causal relationships are found in the path between *social needs* and *efficacy* of political opportunity

(β = 0.241, t = 1.19).

4-5. Summary and Conclusion

The structural equation model was designed to answer the two questions: what factors affect the sources of social capital in cognitive, social and emotional dimensions; and what factors are involved in Internet user's active use of online political opportunities and positive evaluation on expected outcome of such opportunities? The model set people's psychological factors as exogenous variables, which is assumed to explain not only their general Internet use but also political use of the Internet. While social and informational needs as motivations to use the Internet have positive relationships with the sources of social capital, the variable of emotional needs, the factor of which represents such motives as "to pass the time"; "to enjoy myself"; and "to escape from my boring life", has a negative relationship with these sources but positive association with the path toward entertainment sites.

With some negative values in relationships with emotional needs and entertainment sites, all the hypotheses are adopted. The structural equation model provides evidence which confirms a significant impact of Internet use in the creation of social capital and engagement in online political opportunities.

I found unique matches in the path toward the variables of engagement in political opportunities: utilisation of political opportunities is influenced by social needs and strong ties; and efficacy of political opportunities is affected by informational needs and weak ties. Further discussion about these findings will be made in the next chapter but, as mentioned, examining the implications of these distinctive findings requires more evidences and more focused data.

However, this chapter concludes that different Internet users use the medium in different ways and, under specific conditions, the Internet contributes to the creation of social capital and enhanced engagement in online political opportunities.

Chapter V Political Anatomy of Internet Users

5-1. Overview

This chapter constitutes in a sense the climax of the dissertation, with its intensive discussion of the results that I've drawn from the structural equation model analysis and with extended examination of off-line factors involving Internet users' political participation.

The main purpose of the chapter is to analyse Internet users in Korea, the number of which is around 37 million out of the whole population of 47 million as of the end of 2009, from the perspective that the Internet facilitates people to engage in the political process easily and that such forms of political participation are likely to be sustained when social capital is established. Reviewing a variety of published literature produced a certain configuration of the conditions under which social capital is more likely to be created and maintained. In addition, applying them to the structural equation model provides confirmatory evidence that individual use of the Internet could contribute to the creation of social capital and enhance her or his engagement in online political opportunities. The Internet tends to make the political process participatory by affecting the political opportunity structure: more access to political information; direct contact with policy-makers; prompt response from government; and low transaction cost in collective action. My argument is that a wide use of the Internet may be contributory to making the political process participatory and consequently work better.

In addition to the SEM, I conducted logistic regression analysis and cluster analysis in an effort to provide more empirical evidence.

5-2. Explanatory Variables

Any single variable involved in the SEM does not explain an individual Internet user's behaviours in general. It may only latently affect the formation of habits and patterns in individual's daily or political use of the Internet. What the SEM was aimed at is not to describe an explicit behaviour of Internet users but to identify relationships between implicit factors which influence directly or indirectly such apparent patterns of their Internet use. The observed pattern of individual media use can be said to be the result of complex processes in which all the factors work together. However, it may be more likely that some factors predominantly affecting individual Internet user may describe more of the observed behaviour than other factors.

This research started with the presumption: firstly, it is difficult to explain Internet impact on social capital and political participation through technological determinism; secondly, the variables related to internal motives may have more relevancy in explaining such social outcome of Internet use, compared to frequency or duration of Internet use; thirdly, even though such internal motives may be affected by the level of satisfaction resulted from Internet use, my research will treat the variables of motives as endogenously formulated.

I classified the sample in terms of the three latent variables of motives for Internet use. The result shows that while the proportion of the sub-group which have dominantly *information needs* is 56.2% and that of the sub-group holding *emotional needs* is 39.9%, the *social needs* group constitutes only 3.9%. This result may be contrary to the notion that a primary purpose for Internet use is to

exchange email with others, the function of which may be believed to meet *social needs*. However, this finding does not mean that the 96.1% of the samples does not use the Internet for socialising nor that the factor of *social needs* is absent among Internet users.

Table V-1 Predominant Clusters of Motive Factors Among Internet Users

Motivation of internet use	Frequency	%
Emotional Needs	296	39.9
Informational Needs	417	56.2
Social Needs	29	3.9

In my research, *social needs* may be an important factor in relation to the creation of social capital as well as political opportunity engagement, and I believe the factor may exist in the activities of Internet users characterised mainly by the other two factors, *informational* and *emotional needs*.

It may not matter to compare the size of groups which are clustered in terms of a dominant one among the three motives. The core interest lies in relating a certain motive characterising the group of people to some positive condition for the creation of social capital and to their active utilisation and positive assessment of online political opportunities.

Nevertheless, it seems to be necessary to look at some properties of the cluster in terms of key demographic factors for better understandings of those variables. The following table shows the proportions of some key demographic backgrounds in the three clusters of motive variables: the numbers in the column of AGE show the average age of the samples in each cluster; the

values in the column of GENDER shows the proportion of males; the values on the columns of HOME and RESIDENCE show the proportions of those samples who are living in or come from the Capital Metro, which implies Seoul, the capital city of Korea, and its satellite cities; the values of EDUCATION represent the average numerical values scored as follows: junior high school(1), high school (2), undergraduate (3), and post graduate (4) and the values of INCOME are calculated as a percentage of one hundred thousand Wons (₩100,000), which corresponds to around sixty thousand Sterling Pounds (£60,000).

Table V-2 the Proportions of Key Demographic Backgrounds in the Cluster of Motives

Group	AGE	GENDER*	HOME**	RESIDE**	EDUCATION	INCOME***
Emotional needs	29.5	0.45	0.43	0.61	3.00	156.9
Informational needs	31.6	0.53	0.43	0.61	3.01	190.1
Social needs	29.8	0.52	0.38	0.52	3.03	124.9

* The ratio of male
** The ratio of capital metro
*** Ten thousand Wons (%)

Firstly, the relatively higher value for *informational needs* seems to reflect the fact that the motive spreads over most age groups, compared with other motive variables. In contrast, the average age of the group of those people having dominantly emotional needs (29.5) and social needs (29.8) is slightly lower. This finding is not strong enough to demonstrate behavioural differences conditioned by the age of Internet users. However, many analysts suggest that the age factor matters in predicting Internet users' attitudes and behaviour.

Secondly, the table suggests that females are more likely to be influenced by *emotional needs* compared with males. While the proportion of males is over the half of the total samples in the clusters of *informational needs* and *social needs*, the proportion of the females is 55% in the cluster of *emotional needs*.

Thirdly, there are two variables that explain regional background; the variable of hometown (HOME) is the place in which the respondents were born or raised in childhood; and that of residential area (RESIDE) is where they currently are living. The finding from the table, in which overall value in the column of HOME is smaller than those in the column of RESIDE, reflects the sociological fact that a large proportion of Korean population have moved from agricultural areas to the capital city for better opportunities in education or jobs, in particular, from 1950s to 1980s. The findings from the analyses of these two variables is interesting in that those peoples who come from local regions or are living in those areas show higher scores in *social needs*. This propensity may be in line with the notion which many Koreans share: *chon-sa-ram*, a term in Korean degrading those who come from rural areas, like *country bumpkin* in English, tends to reflect their dense and strong social relationships, compared with most urbanites who are said to be more individualistic.

Lastly, differences in income level among the three clusters need more discussion: people having strongly *informational needs* tend to have higher income levels than those who have score higher on *social needs*. Several explanations seem possible: one of them is that information needs spread over most age groups including middle age groups earning more than younger age

groups.

5-3. On-line Sources of Social Capital

Prior to further analysis, it is necessary to recapitulate the main points of the conditions under which Internet users may be rich in social capital. Firstly, *public information*, such as government statements on particular policies, is not only a resource sought by motivated political actors but also a stimulator encouraging people to get involved in civic affairs. In my research model, public information is set as a basic source of social capital at the cognitive dimension and the frequency of visiting public website is measured as a behavioural variable to be associated with this source. Secondly, regarding *social networking* as the source of social capital at the relational dimension, it would be ideal that bridging and bonding social capital be developed by maintaining weak and strong ties respectively, which makes it possible to appropriate social support from within one's social network and diverse information from the outside. Thirdly, *virtual community* is the source of social capital at the structural dimension. An attitudinal asset for the individual, trust in the community, may lead to trust in the public sphere and the likelihood of social capital. All in one, the conditions under which social capital is most likely to be created comprise (a) frequent visiting to public rather than entertainment sites, (b) higher level of weak ties, (3) higher level of strong ties, and (4) higher level of trust in virtual community.

5-3-1. Access to public information

Key Features

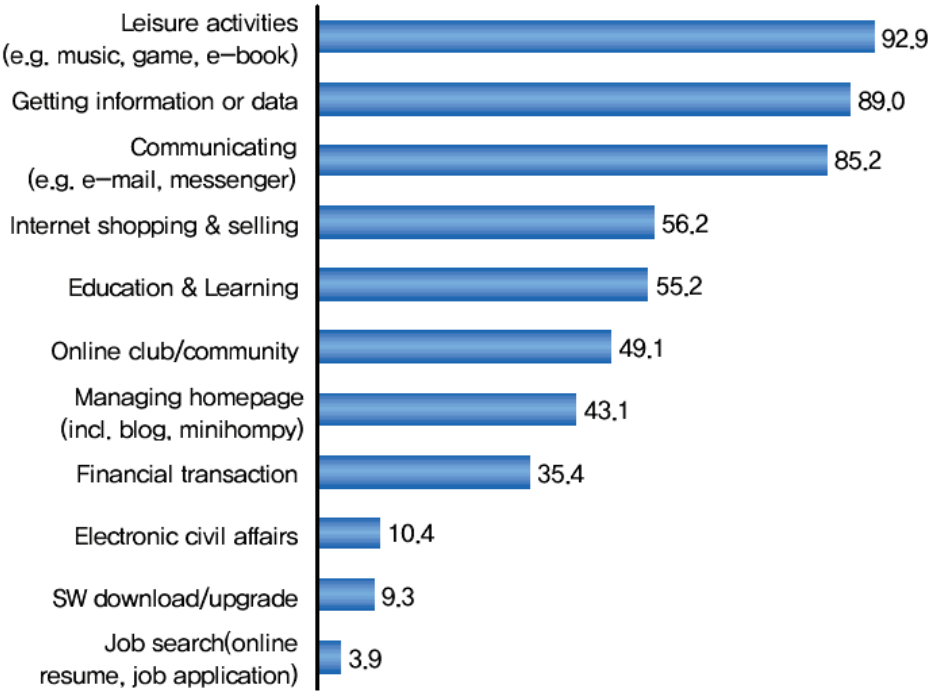
Public websites are assumed to have positive effect on the creation of social capital by providing citizens with authentic and reliable public information, which can be transformed into civic or political knowledge. Along with Galston (2001), it is asserted that civic knowledge is crucial to the production of political capital. The frequency of visiting such public websites is worthy of discussion because it can be associated with political interest which is believed to be a key component of political capital.

The frequency of visiting two contrasting websites was measured by asking: “how many times have you visited public websites on average each month?” and “how many times have you visited entertainment websites on average each month?” I helped respondents understand the definition of the two categories of websites by supplying examples of each category: public websites include government websites, political websites or civil movement group websites; and entertainment websites are those sites offering such content as gambling, games, or adult movies. My survey shows Internet users’ frequency of visiting entertainment sites is much higher compared to public sites: the proportion of Internet users who visit entertainment sites more frequently than public sites is 73.3 % (544 cases) as against 26.7% (198 cases) who do the opposite; the mean number of the latter is 6.01 while that of the former is 21.79; the median of the latter is 2 and that of the former 10; and whilst the number of respondents reporting no visit to entertainment sites is 30 (4%), the number of

those saying no visit to public site is 74 (10.1%). Given that civic movement sites are included in the definition of public sites, the frequency of visiting websites of government and political parties will be much smaller. This trend seems consistent with data from other sources and it must be fairly prevalent.

Chart V-1, which is compiled by the National Internet Development Agency of Korea (NIDA), shows that 92.9% of Internet users check leisure activities as their purpose of Internet use when multiple choices are allowed. Most of the leisure activities may be possible in what I call entertainment sites in my research project.

Chart V-1 Purposes of Internet Uses (%)



Source: National Internet Development Agency

Table V-3 shows the relationships each cluster of visiting frequency for entertainment and public websites have with key demographic variables. The value in the column of HOME is the proportion of the respondents who were born in the area of capital metro city and that in the column of RESIDE is the proportion of the respondent who are currently residing in that area.

Table V-3 Clusters of Visiting Frequency

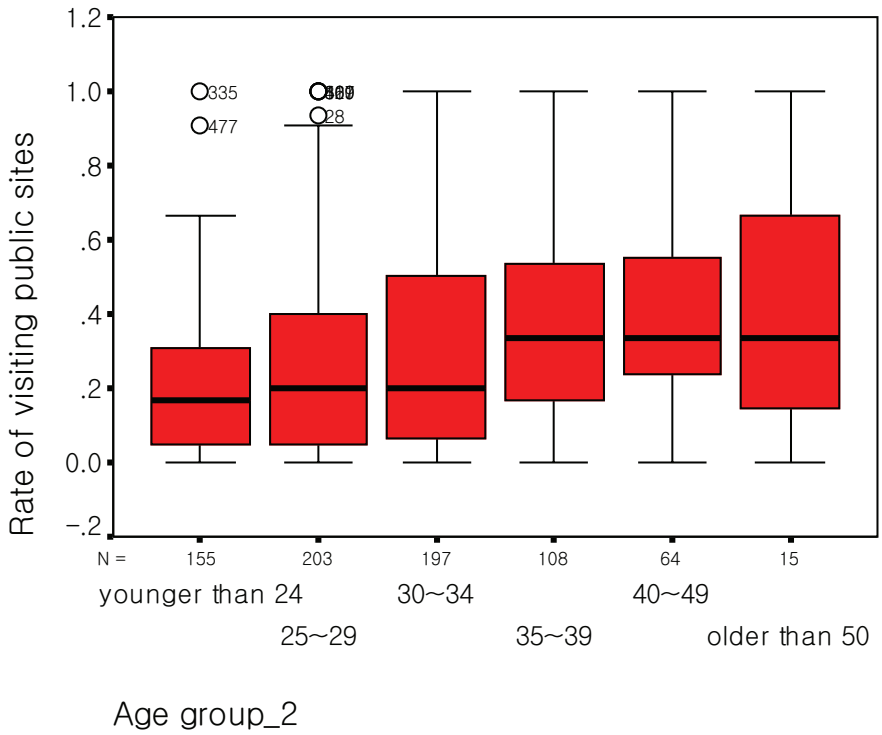
Group	AGE	GENDER *Ratio of males*	HOME *Ratio of capital metro*	RESIDE *Ratio of capital metro*	EDUCATION	INCOME *Ten thousand Won (%)*
Entertainment site	29.8	0.50	0.46	0.61	3.00	166.6
Public site	33.1	0.50	0.36	0.60	3.04	195.7

Education: 1=junior high, 2=high school, 3=undergraduate, 4=graduate

Firstly, respondents who mainly visited entertainment sites are likely to be younger than those who mostly visited public sites. Secondly, it is interesting to find that while no difference is detected in the variable of current residence (RESIDE), Internet users coming from capital metro-cities, like Seoul, are more likely to visit entertainment sites whereas Internet users from more rural areas are more likely to visit public sites than those from metropolitan areas. This finding should be interpreted carefully: such behaviour may not reflect urban/rural differences but an age factor. While many older Internet users have moved from rural areas to urban ones, most of the younger Internet users have been born and brought up in urban areas. Thirdly, this table shows that the higher people's income level, the more likely they are to mainly access public sites.

I would like to discuss further the relationship between frequency of visiting public websites and the age factor. It seems plausible that the younger generation in Korea as in other democracies are more attracted to entertainment sites rather than to the public issues such as provided on government websites. The boxplot chart below, V-2, compares the characteristics of age groups in relation to how frequently the members of each group visit public websites. The main difference is between younger and older users, with older age groups making more use of public sites. The median is similar in the age groups younger than 34, but, the older the age group is, the wider the upper quartile becomes. In similar way, age groups older than 35 indicate the same median, but the upper and the lower quartiles of the over 50 aged groups are wider. While most members in the youngest age groups visit public websites infrequently, some members in the age group of 30-34 visit public sites more frequently than average. A similar phenomenon seems to appear in age groups older than 35.

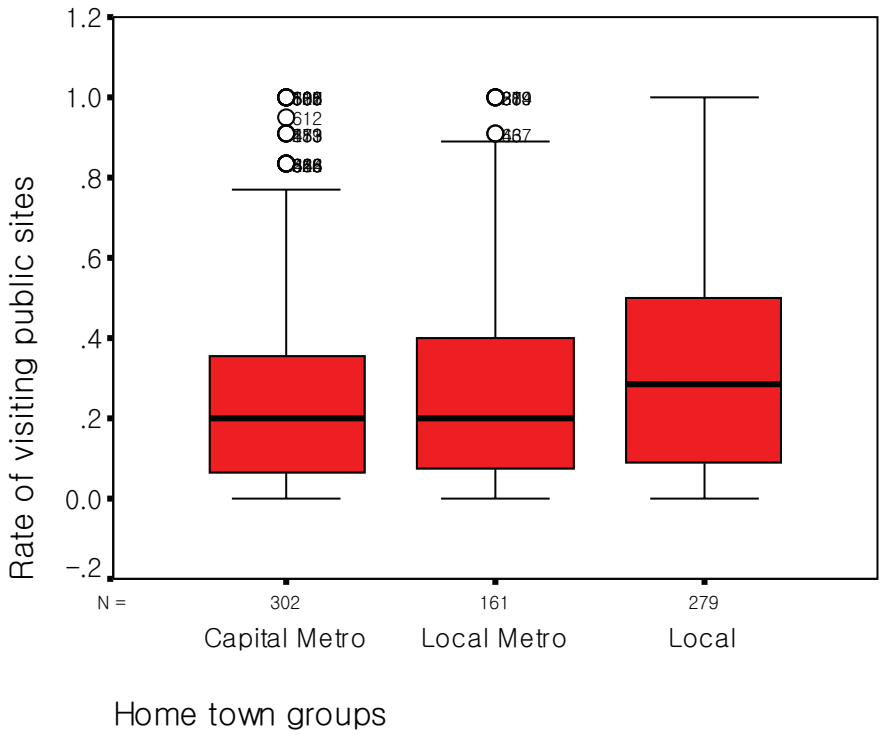
Chart V-2 Visiting Public Sites: Boxplot by Age Groups



The boxplot Chart V-3 below shows the relationship between regional background of internet users and frequency of visiting public websites. People born in the more rural provinces are more likely to visit public websites than those born in the capital metropolitan area and other metropolitan cities.

The data from the box plots broadly support the result of cluster analyses: the more likely respondents are to come from or live in local areas and the older they are, the more frequently they visit public websites. Examination of variance in other variables show some differences: the middle group ($3000~$3990) in income level visit public websites more often than people in the higher or lower income levels; and the higher a person's level of formal education, the more often they visit public websites.

Chart V-3 Visiting Public Site: Boxplot by Residential Area of Users



In the survey in 2001(n=1150), I provided 15 categories of websites as used in the survey of KRNIC and asked respondents to select three items in order from the most frequently visited website to the third most frequently visited website. Afterwards, I recoded the data by grouping the 15 categories into four broad ones: public site, social site, living site and entertainment site.

- Public site: central/local government site; political parties/politician site; and citizen movement groups/NGO site
- Social site: Internet BBS/Internet café; hobbyist site; news site; chatting site
- Living sites: online banking site; reference site; search site; online

shopping site; tourism site; cyber-study site

- Entertainment site: lottery/game site; Internet movie/music; cartoon site

As the most frequently visited sites, just 0.5% of respondents selected public sites, whereas 35.5% used social sites, 52.6% used living sites and 11.4% mostly used entertainment site[58]. In aggregate frequency, the proportions of people visiting different kinds of site -- the most, the second and the third most frequently visited – is 1.5% for public sites, 30.5% for social sites, 51.2% for living sites and 16.7% for entertainment sites.

With the well-established findings that the most Internet users more frequently visit entertainment sites rather than public ones, firstly, does this propensity of Internet users support the thesis that Internet use decreases social capital? (Kraut, Lundmark et al. 1998; A.Kohut 1999; Nie 2001); and secondly, what is the role of the public sites in the political process? The former issue will be discussed in the last chapter, and the latter one will be explained in the following section.

Political Information and Political Process

Among public websites, there may be some difference in visit popularity between the websites of formal institutions, such as government or political parties, and those of information or civic groups, such as citizen movement groups (CMGs). However, CMGs have been said to make good use of the Internet for mobilising political support as well as information dissemination (Pickerill 2000; Hague and Uhm 2003). In other words, Korean social activists

have utilised information technologies and new media more actively than formal political institutions, a phenomenon which seems to be in common with Western countries (Pickerill 2000). Input from informed and knowledgeable citizens makes public websites function as channels through which participatory democracy works.

Efforts to make government websites the face of electronic government should include enhancing transparency, promoting interactive communication between government and citizens and implementing citizen empowerment. Some analysts (Porte, Jong et al. 1999) emphasise government openness as a measure of its response to citizen's demands for information and services from government organisations. Lack of openness in government websites can be seen as unresponsiveness to citizens' request for government action, or inability or unwillingness to serve them. Government openness toward citizens involves recognising citizens as partners and providing as much information and knowledge as possible for them, which helps citizens to be informed and knowledgeable and promote the creation of social capital.

Some theorists have criticised classic theories of social capital for failing to consider the relationship between government and citizens (Tarrow 1996; Maloney, Smith et al. 2000; Norris 2000). According to them, Putnam perceives the nature of the state as exogenous factor (Tarrow 1996) and neglects the role played by political structure and institutions, such as government, in shaping the context of associational activities and hence the creation of social capital (Maloney, Smith et al. 2000). In contrast to Putnam who emphasises the

importance of horizontal networks among citizens, they argue that through vertical networks political institutions have a significant role in helping to sustain civic vibrancy and probably also in stimulating its growth (Maloney, Smith et al. 2000). Prerequisites for such an approach may be an interactive vertical network characterised by two-way communication, rather top-down one-way management as in the past.

The ideal of participatory democracy could be attained more effectively with a high level of social capital in a society (Putnam 1993; Rheingold 1993). Contrary to the idea that social capital in the horizontal social network will promote political participation, some analysts argue that social capital is not necessarily associated with political participation (Newton 1999; Puchs, Minnite et al. 2000; Harwood and Lay 2001). That is why I introduced the concept of politically-relevant social capital in this research to specify the kind of social capital functioning in political process. To tap the source of social capital through people's behaviour on public websites, we need to shift our focus on to the social and psychological background by asking why people visit public websites, rather than concentrating on quantitative measures.

Political Interest and virtuous circle

It may well be that Internet users do not count the exact number of visits to public website every month. Nevertheless, the frequency of reported visits is of importance not because the number is objectively correct but because it indicates the level of intensity and activeness with which users access public information. The level of motivation might arguably influence retrospective

estimates of the number of times users visit public websites. That is why I did not exclude seven outlying cases in which users reported that they visited *public websites 100 times or more every month*. Such reported frequencies may not be wholly accurate, but they almost certainly reflect users who are very active.

According to the path analysis of the structural equation modelling in Chapter IV, Hypothesis 1-1, *people's motives for Internet use influence frequency of visiting websites*, was adopted based on significant value in the path from informational needs to public website (γ = 0.11 t=2.45). No significant relationships were confirmed in the path from social needs (γ = 0.06 t=1.42) and emotional needs (γ =-0.068, t = - 0.54) to public sites. On the contrary, the positive impact emotional needs have on visits to entertainment websites is confirmed (γ =0.08, t=1.89) as assumed, and hypothesised influences of social (γ = -0.02, t = -0.46) and informational needs (γ = 0.05, t=1.16) on entertainment websites are rejected.

I assume that in most cases the frequency reflects an individual's level of political interest even before her or his usage of the Internet. Literature suggests causal interrelationships among political interest, political activities and an actor's effort to seek political information (McQuail 1985; Markus 1987; John 1994; Norris 2000; Pinkleton and Austin 2001). The social information processing thesis (Fulk, Steinfield et al. 1987) seems to be useful in explaining peoples' activeness in seeking political information: they might decide to use the Internet taking both their communication goals and the utility of the Internet

into account. In this course, social cues are critical to accessing the utility in comparison with communication tasks.

People already with political interest are more likely to use the Internet for the purpose of obtaining political information; the information will stimulate their political activities or political engagement, and such actions make them seek more political information. Those interested in off-line politics are assumed to be exposed more often to online political opportunities than others less interested in politics. The virtuous circle (Norris 2000) could be extended to political efficacy and political trust: factor X stimulates political interest, political interest causes information needs and seeking for political information, the political information induces political engagement, the engagement requires more political information, and such a combination of political information and activities generate political trust and efficacy.

Recently, some analysts argue that access to political information should be assessed in terms of its quality rather than just quantity, based on the number of users accessing an account. Counting the number of visitors to government websites may not be enough to understand correctly the performance of the websites. If most of the visitors are motivated by pure curiosity or for cathartic discharge without offering rational alternatives (Uhm and Hague 2001), it may not be said to be substantial political participation. The quantity of postings guarantees neither equal participation nor vigorous exchange of opinion.

Another issue to be considered is about what way governments respond to peoples' engagement in online forums on the government websites. Findings

(Ryan 1996; UN 2004) show that *impersonality* can cause people's disinterest in such websites when managed by government or political parties. The finding of course cannot be applied to other countries at this stage, but it may be logical to think that persons with social needs will not be motivated to spend their time and energy visiting websites where they are not recognised as partners for social relationship. When governments consider inviting citizens into consultation over policy issues and seek to establish trustworthy relations with them, impersonality on government websites needs to be reduced. Those Internet users with social needs are more likely to convene around a *human* network.

Government websites may not be solely responsible for providing public forums or the provision of space for public deliberation. For example, some websites originally created as private hobbies are now functioning for public discourse. In Korea, *DC Inside* is the title of a website providing virtual community for amateur photographers, in which they get together for sharing their photos and information about techniques for taking good pictures. DC inside has expanded beyond this, however, and the community functions as a form of public sphere by encouraging members to share political opinions with each other.

It would be wrong to infer that young adults are retreating into pure privatism (Galston 2001). Acquisition of political knowledge from traditional news sources in Korea may have fallen, and relatively few young people are using the new media, including the Internet, to replace newspapers and TV news as sources of political information. Young people in 1990s and 2000s have engaged in

public issues in a different way from their predecessors in 1950s, when Korean people participated excitedly in political process. This is supported by empirical findings (NASS 1999)[59], and can be explained by the thesis of post-industrial society (Inglehart 1997; 1997; 1999).

5-3-2. Strength of Interpersonal Ties

Key Features

The concept of *weak* and *strong ties* is reflected mostly in the seven questions with the same wordings in both surveys. Both DATA 2005 and DATA 2001 tap two different types of interpersonal ties: one type is drawn from relationships with old friends, other members of off-line associations, and family members; the other type from relations with people previously unknown or from different fields.

Table V-4 Rotated Components Matrix (DATA2005)

	Component	
	Weak ties	Strong ties
Tie 1: Continue to keep in touch with old friends	.169	.846
Tie 2: Restore relationship with old friends	.248	.824
Tie 3: Get to know somebody new	.720	.244
Tie 4: Get closer with family members	.329	.634
Tie 5: Participate more often in associations	.569	.544
Tie 6: Meet people who can help me	.786	.314
Tie 7: Meet people in different fields	.876	.176

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 3 iterations.

In the stage of research design, I assumed that the weak and strong tie

variables might be independent of each other. The exploratory factor analysis produced only one factor retaining eigenvalues of greater than 1: factor 1, which corresponds to *weak ties*[60]. By assigning two factors as minimum number of factors, I could have factor 2 (strong ties) as well as factor 1(weak ties), explaining 13% and 54% respectively of variance. This arrangement had to be taken to extract two different variables as suggested by the academic literature and the rotated components matrix below shows relevant factor loadings as expected in the stage of research design.

I categorised all respondents in term of the strength of interpersonal ties using cluster analysis and divided them into two groups, defined by the users' scores in terms of weak and strong ties: Table V-5 shows 63.1% of the samples scoring higher on weak ties, which implies that, if the distribution of the samples is normal, almost two third of Internet users in Korea use the medium actively to develop and maintain new interpersonal relationships.

Table V-5 Weak and Strong Tie Clusters among Korean Internet Users

Personal relationship	Frequency	%
Strong Tie	274	36.9
Weak Tie	468	63.1

In Table V-6, while questions TIE3, TIE6, and TIE7 ask about weak tie relationships, TIE1, TIE2, and TIE4 are without doubt about strong ties. In contrast, the variable of TIE5 shows a similar value in factor loading between weak and strong ties: 0.57 and 0.54 respectively. The question, "I can

participate more frequently in associations, social gatherings, and club meetings," may have different implications for different Internet users: to some people, such off-line social gatherings may be chances to strengthen existing strong ties, but to others the opportunities may be used to meet new people. At the design stage, the question was intended to ask about strong tie relationships.

There seems to be no significant difference in the cluster analysis in terms of demographic variables, but Table V-6 suggests that more male respondents tend to maintain weak ties than female ones. This is consistent with other findings that males are more likely to have social and informational needs, which are directly or indirectly connected to the variable of weak ties. That finding is interesting enough to encourage researchers to focus on the gender difference in the strength of online interpersonal ties.

Table V-6 Weak and Strong Tie Clusters among Korean Internet Users: Demographic Variables

Group	AGE	GENDER *Ratio of male*	HOME *Ratio of capital metro*	RESIDE *Ratio of capital metro*	EDUCATION	INCOME *Ten thousand Won*
Strong	30.86	0.45	0.42	0.59	3.04	173.5
Weak	30.6	0.52	0.44	0.62	2.99	174.8

Education: 1=junior high, 2=high school, 3=undergraduate, 4=graduate

The boxplot charts below show relationships between educational background and the strength of interpersonal ties: strong and weak ties. As shown in the box plots, when the variables, *strong* and *weak ties*, are related to educational background, the group of Below Middle School is relatively high both in *strong*

and *weak ties*. Considering this group score is relatively high in *social* and *informational needs* but scores lower in *emotional needs*, it seems to be evidence for the influence of educational background on the strength of interpersonal ties. However, the finding needs more examination before concluding that less educated Internet users are more likely to have both weak and strong social ties than those educated beyond high-school. In other words, the finding in this data set cannot be generalised over the whole sample of Internet users in that this sub-group of users has only three cases. These respondents are not old enough to be related to another finding which suggests a tendency for older Internet users to score higher on both weak and strong ties.

Chart V-4 Variance of Strong Ties in Educational Background

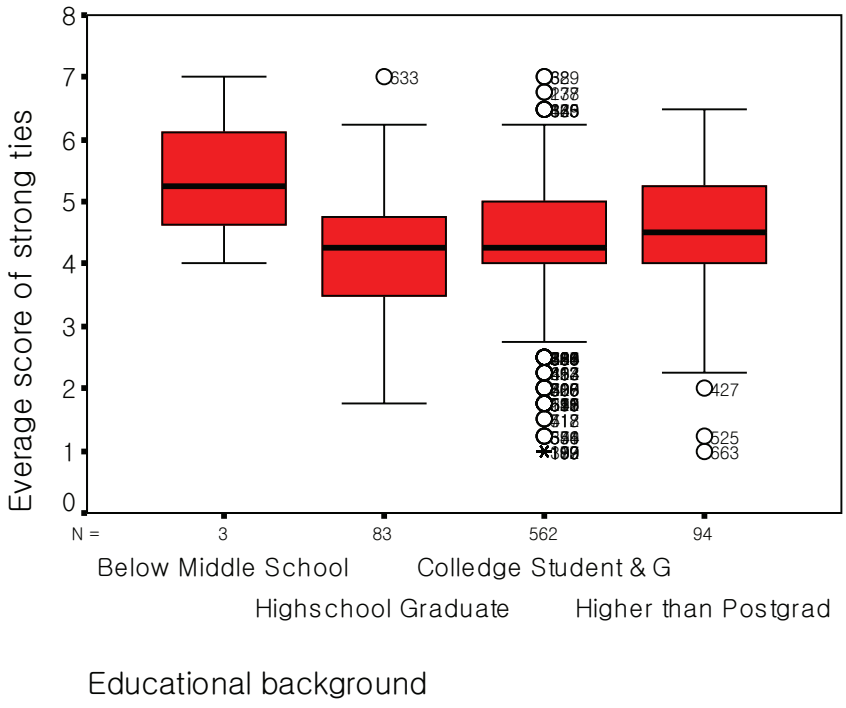
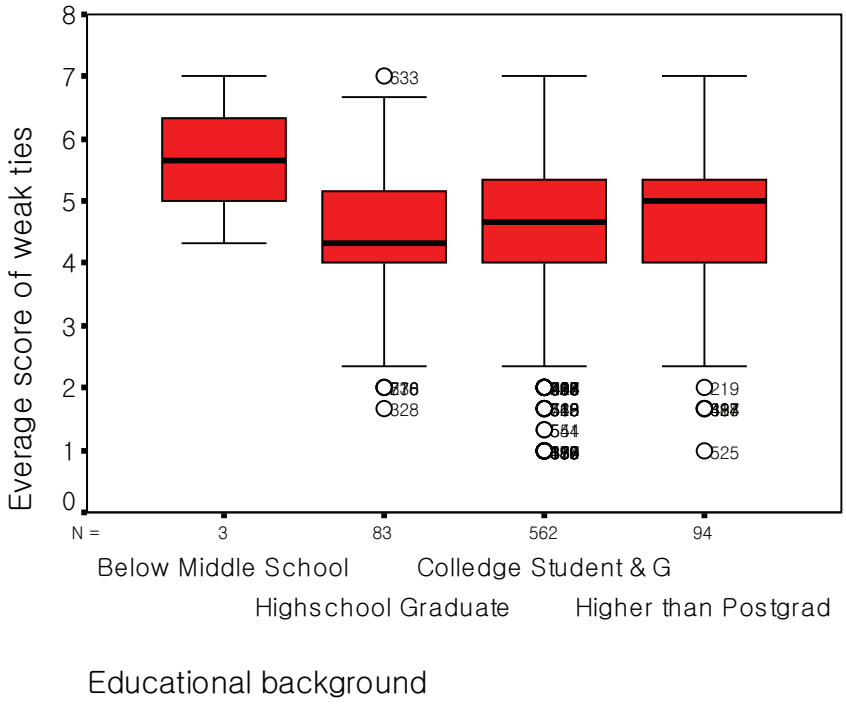


Chart V-5 Variance of Weak Ties in Educational Background



The result of path analysis in the previous chapter shows that *weak ties* are not affected only by *informational needs* (γ =0.165 t=4.278) but also by *social needs* (γ = 0.42 t = 12.20). *Weak ties* are affected slightly stronger by both *social* and *informational needs* compared to *strong tie relationships* (γ =0.36 t=9.73 for social needs, γ =0.12, t=2.97 for informational needs). This finding is contradictory to the assumption that while *social needs* affect *strong interpersonal ties*, *informational needs* affect *weak ties*. The finding from data analysis shows social needs have more influence on weak ties as well as on strong ties. *Emotional need* of course has no effect or slightly negative impact on social ties.

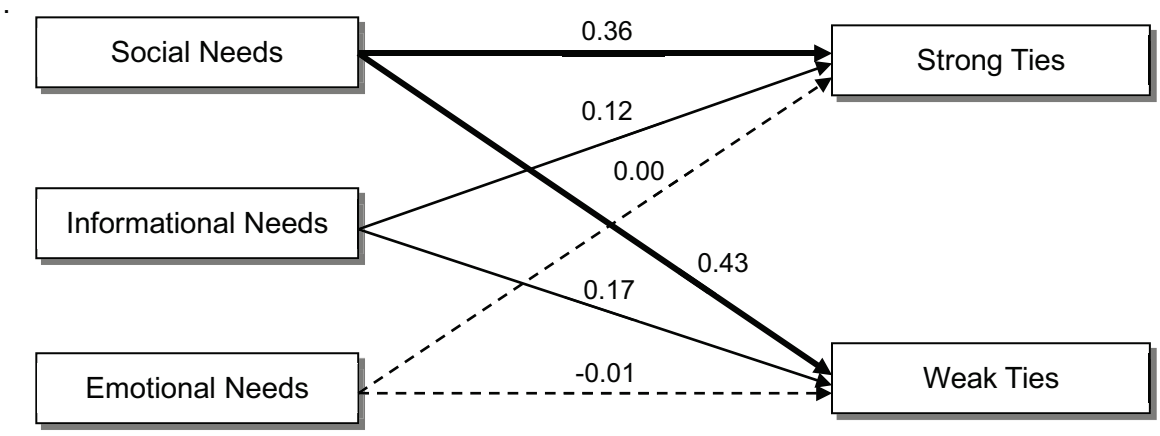
Interpersonal ties, whether they might be *strong* or *weak ties*, are mostly influenced by one factor in the same direction. According to the finding, Korean

Internet users at least who maintain predominantly *weak ties* use the Internet so as to extend social networking instead of seeking information sources.

Social capital theorists divide social capital into two forms: bonding and bridging social capital, which are different from each other in characteristics and functions. Putnam (1993; 2000) regards bridging social capital as good for crosscutting social networking. In contrast, bonding social capital may have negative impact on democratic society because it may strengthen the solidarity of a faction without tolerance or cooperation with outsiders. In general, it is said that *strong ties* will be linked to bonding social capital and *weak ties* are connected with bridging social capital.

My data suggests that such clear-cut relationships are not necessarily found. Instead, it seems more plausible to say that Internet use facilitates both bridging and bonding social capital. As Chart V-6 below shows, social and informational needs affect strong and weak ties in the same direction: the two motive variables have slightly more influence on weak ties; and the variable of social needs has higher value than that of informational needs in the relationship with the two variables of interpersonal ties[61]. The values in Chart V-6 are standardised regression weight, which are criteria for comparing relative influence of independent variables on dependant ones. The thickness of the lines shows relative volume of direct effect.

Chart V-6 the Relationships between Motives and Ties



Discussion

The finding that, compared to *information needs*, *social needs* are more likely to motivate the establishment of both types of interpersonal ties may be partially explained in terms of Korean people's traditional social networks, even if these have been formed in an off-line context: *hyeolyeon* in Korean or blood kinship, *hakgyeon* or school alumni, and *jeeyeon* or networks of people sharing a geographical background or the same hometown.

In some respects Korean society is highly meritocratic. It is well known as fiercely competitive in education, with one of the highest proportion of graduates in the world. Graduates from highly-esteemed universities derive advantages in the labour market, but some analysts question whether or not these advantages accrue from a university's prestige or from graduates' social background, ability, or different types of social capital. Lee and Brington (1996) examined the relationships among university prestige, human capital, social

background, and students' access to social capital through their university (institutional social capital) and their families and friends (private social capital), using data on male university graduates in Korea. They found, however, that private social capital does not tend to lead to the best jobs, but, instead, the probability of being matched with a top employer is higher through direct application and is enhanced at prestigious universities through the schools' provision of introductions to employers. While the process of recruitment is very competitive, the close relationships among family background, human capital, and university prestige mean that a highly select group of Korean men acquire the best jobs.

There has been a prevailing perspective that affective linkages based on kinship or geography can cause fragmentations in society. Lew (2001), however, asserted that affective interpersonal linkages can become a useful resource in the coming post-modern society where atomized individuals search for meaningful relations with each other and try to become members of a community. Among the three types of group in Table II-2, a large proportion of Korean people belong to C-type groups, which are based on affective linkages, such as kinship, regionalism or school ties. Social capital does not necessarily have to take the form of voluntary association (Coleman 1988; Putnam 1995; Bourdieu 1997). According to the classical theorists, social capital can be created in a *closed network* in which the members exchange “generalized reciprocity” as the public good. In this sense, the affective linkage groups in Korean society furnish a source of extremely strong social capital. I would like to argue that these traditional social networks of Korean society are the

principal sources of social capital, whether or not their side-effects may cause negative impacts on the wider society.

Weak ties are said to be vulnerable to changes in media environment. Haythornthwaite (2001) argues that in a relationship supported by weak ties individuals have little motivation to strengthen their ties, particularly, when a new medium replaces an existing, widely-established means of communication. On the contrary, where ties are strong, communicating pairs or group members will adapt their use of media to support the exchanges important to their tie.

Haythornthwaite's observation seems to be the case in which a new medium maintains weak ties for a long period of time. Her argument may not explain the phenomenon where the Internet develops weak ties into strong ties.

People who meet together in virtual community also tend to contact face-to-face with each other, which is called off-line meeting or just "*off*." For example, hobbyists for digital camera come together at first around their website, *DC Inside* (www.dcinside.co.kr), without any social cues, and then many of them meet to go out to take pictures together. Later, they post photos, which they have taken in off-line events, to the bulletin board or galleries of their websites and exchange comments on each photo. Whether those comments are praise or criticism, members appreciate them as helpful to enhancing their skill and developing a good eye for photography. Throughout these courses, they become more and more attached as members of the virtual community and consequently share a great deal of solidarity, which we have previously expected to come from strong ties in off-line and face-to-face relations.

In relation to the new form of interpersonal relationship established through the Internet, we need to pay much attention to social network sites, such as Facebook[62], My Space[63], and Cyworld[64] in Korea. Boyd and Ellison (2007) define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. In practice, however, the nature and nomenclature of these forms of interpersonal connections may vary from site to site. In general, such social network sites offer users functionalities for *identity management,* and enable them to *keep in touch with other users* (Richter and Koch 2008). They allow individuals to present themselves in chosen ways, articulate their social networks, and establish or maintain connections with others. These sites can be oriented towards work-related contexts (LinkedIn.com), romantic relationship initiation (Friendster.com), connecting those with shared interests such as music or politics (MySpace.com), or the college student population (Facebook.com) (Ellison, Steinfield et al. 2007). Those sites seem to make Internet users establish and maintain, efficiently and systematically, new forms of social network online.

Ellison and Steinfield (2007) examine the behaviour of Facebook users to determine whether offline social capital can be generated by online interactions. The results of their research show that Facebook use among college-age respondents was significantly associated with measures of off-line social capital. They found that a large proportion of Facebook members share relationship

with people they meet in the off-line world rather than new people. In addition to assessing *bonding* and *bridging social capital*, they invented the concept of *maintained social capital* in order to specify the kind of social capital that is related to one's ability to stay connected with members of a previously inhabited community.

Some analysts (Kim and Yun 2007) employ relational dialectic theory (Baxter 1988) to explain online social networks, which they regard as a result of the conflicting emotional needs felt by the participants of any relationship, who experience tugs and pulls causing relationships to be in a constant state of flux. Communication technologies are used to maintain established relationships, but most models have focused on relational dynamics within newly formed online dyads and groups (Kim and Yun 2007). Social network sites, such as Cyworld, encourage users to transcend the high-context communication of off-line life by offering an alternative channel for elaborate and emotional communication, which fosters the reframing of relational issues offline. Kim and Yun argue (2007) that the era of new communication technologies appears to have introduced a new dialectical dilemma: a tension between the offline world and its online counterpart. Communication technologies seem to create a new space that represents neither, but rather exists somewhere in-between.

Combining those many arguments that touch on the properties of social capital online, I would argue that Internet use tends to invigorate off-line social network and off-line face-to-face contacts may strengthen the weak ties the Internet facilitates, consequently creating social capital different in quality from the one conceptualised by classical theorists.

5-3-3. Trust in Virtual Community

On virtual community as the source of social capital at the structural dimension, I set up two variables: frequency of joining virtual community at the behavioural level and trust in the virtual community at the attitudinal level. In the course of model identification, however, I found the variable at the behavioural level impairs the model's goodness-of-fit. I concluded that an explicit behavioural factor, frequency of visiting the virtual community, is not necessarily associated with the person's trust, a latent attitudinal factor, which is believed to contribute to the creation of social capital. I decided to exclude the behavioural factor out of my research model in order to improve the goodness-of-fit of the model.

There is no significant difference in the variance of this variable in relation to gender, age, hometown, residence, income and educational background. In the structural equation modelling, however, informational and emotional needs are not associated with trust in virtual community (λ=0.348, t=9.146). Trust in virtual community is strongly affected by social needs. The more social needs people have, the more they trust in virtual community. People trusting in virtual community are more likely to care about other people in the community. They are likely to contribute to the cultivation of the norms of reciprocity and abide by rules in the community. As the result of the SEM analysis indicates, on the contrary, informational benefit from virtual community may not function as any incentive to Internet users. Indeed, people seem to regard virtual community as the space for collective action rather than an information source. Korean society has experienced that some agendas raised in the virtual communities

attract national attention and can evolve into policy issues. In some cases, the intensity of collective action overwhelms the search for truth of the issues in question and can damage human rights and privacy.

5-4. Engagement in Political Opportunity

5-4-1. Two Paths

The ultimate goal of this research is to answer the question: does the Internet contribute to political participation? The study started with the assumption that such political usage of the medium depends on Internet users' individual characteristics as well as the social context. Variations in people's usage of the medium may be caused by their internal needs or motivations, which can be regarded as the individual conditions. Social context may be determined by the characteristics of their ego-centric social networks. In other words, the social impact of the Internet is conditioned by the properties of individuals' relationships with other people, society, and government.

In this research, social capital is introduced as resources which do not only facilitate individual actors to attain their goals but also make democratic political processes work better than otherwise. Social capital helps to make a whole society more cooperative than otherwise and provides individual members with useful resources for their living. Many believe that collective use of the Internet leads to a form of community in which the users of the medium address common problems and cooperate with each other to solve them (e.g. Rheingold 1993). As I have experienced in the course of the research, the

Internet facilitates encounters with some people who are helpful to others in achieving a goal.

Social capital will be an important aspect of an Internet-supported society in which voices on common interests and public issues should be “clear so that public officials know what citizens want and need, loud so that officials have an incentive to pay attention to what they hear, and equal so that the democratic ideal of equal responsiveness to the preferences and interests of all is not violated” (Verva, Schlozman et al. 1998). My principal hypothesis was that individual Internet users or communities with significant social capital are more likely to engage in the political process or to pursue political opportunities. To examine this, I established a set of social capital creating conditions based on published literature and discourse on social capital and then investigated what individual factors are positively associated with these conditions. The examination showed that social and informational needs of individual Internet users meet them whereas emotional needs are negatively involved. As a result, it was identified that individual factors positively associated with social capital or political engagement.[65] The variables of Internet effect on individual and on society are made available: variables on individual motives for Internet use and variables on the sources of social capital.

This section will attempt to answer to the question, *does the Internet contribute to political participation,* based on the results of SEM (see 4-3-3 The Structural Equation Model: Path Analysis) and some other evidences. As stated earlier, the effect of the Internet will be mediated by individuals’ motives and social

context, leading to some changes in their political engagement. That is, the Internet affects political opportunity via individuals' motives and social capital creating conditions.

The results of SEM show two flows of major influence from Internet-use motives and social capital-creating conditions to engagement in online political opportunity, to which I would refer as two clusters of paths. The first cluster covers (a) the relationships of *motive* variables with *strong* and *weak* ties, (b) the relationships of *motive* with *engagement* (*utilisation* and *efficacy*) in online political opportunity, and (c) the relationship of *strong* and *weak* ties with *engagement*. This cluster represents *Internet influence through interpersonal social networks* in that it focuses on the relations of motive variables with strong and weak ties and the relations of such interpersonal ties with engagement in online political opportunity. Let this path called as a ***relationship expansion path*** in that interpersonal relationships are expanded in depth and width.

The second cluster describes (a) the relationships of *motive* variables with *frequency* of visiting public sites and *trust* in virtual community, (b) the relationships of *motive* with *engagement* (*utilisation* and *efficacy*) in online political opportunity, and (c) the relationship of *frequency* and *trust* with *engagement*. This cluster highlights virtual aggregations of people and social institutions in terms of Internet users' behaviour (frequency of visiting public websites) and attitude (trust in virtual community) on the virtual objects (governments, community and etc.). This path may be named as a ***public***

issue grouping path in that through the path common interests are identified, information about public issues are shared, and interest groups are aggregated.

5-4-2. Relationship Expansion Path[66]

The result of path analysis in Chapter IV shows that the variables on engagement in political opportunity have some *consistent* relationship with social tie variables and motive variables: while *utilisation* of political opportunity is connected with *social needs* (γ=0.27, t=6.60) and *strong ties* (β=0.19, t=4.47), *efficacy* is related with *informational needs* (γ=0.30, t=7.38) and *weak ties* (β=0.11, t=2.35). Concerning the relationship between the variables of social ties and those of engagement in political opportunities as shown in Chart: while the relationship of weak ties with efficacy is confirmed (β=0.108, t=2.352), relationship between efficacy and strong ties is rejected; while the relationship of strong ties with utilisation is adopted (β=0.193, t=4.471), the relationship with weak ties are rejected. These findings imply that frequency in utilising political opportunity may be determined by a mechanism that is different from that affecting a sense of efficacy of political opportunity.

In order to explain these complicated paths, it may be necessary to revisit the procedure through which the variables of online political engagement are drawn out. The two variables, *utilisation* and *efficacy* of political opportunity, are drawn from the confirmatory factor analysis of eight observed variables. *Utilisation* represents the frequency of engagement in online political opportunities: accessing of political information, contacting politicians,

requesting public services, and mobilising for collective action. *Efficacy* reflects the degree to which people think online political opportunities will contribute to enhanced performance of the political process or to democratic development. *Efficacy*, as a variable describing an individual's attitude toward Internet influence, is in my research less analogous to political efficacy generally discussed in political science, but refers instead to the instrumental value or effectiveness of online political opportunities that an individual subjectively feels. Although the two variables, *utilisation* and *efficacy*, have moderately strong correlations with each other (Pearson Cor.= 0.40), they are independent of each other and function on different dimensions: while *efficacy* is an attitudinal indicator measuring the individual's evaluating the values of political opportunity, *utilisation* is a behavioural one concerning the frequency or activeness in utilising political opportunity. The reason for setting two variables in this way is to examine closely individual political use of the Internet at two different levels. This scheme is arguably more valuable in that a person's attitude needs not automatically to be transformed into the person's behaviour, or the reversed. In other words, a person rating highly the opportunity of direct contact with politicians will not necessarily send e-mails to a politician in the absence of specific motives. That is to say, in the examination of people's engagement in online political opportunities, causal factors affecting the attitudinal dimension of their political opportunities engagement are different from those on the behavioural dimension as shown in Chart V-7. However, overall path from variables related to the expansion of social relationships have positive influence on online political opportunities engagement.

Chart V-7 Relation Expansion Paths

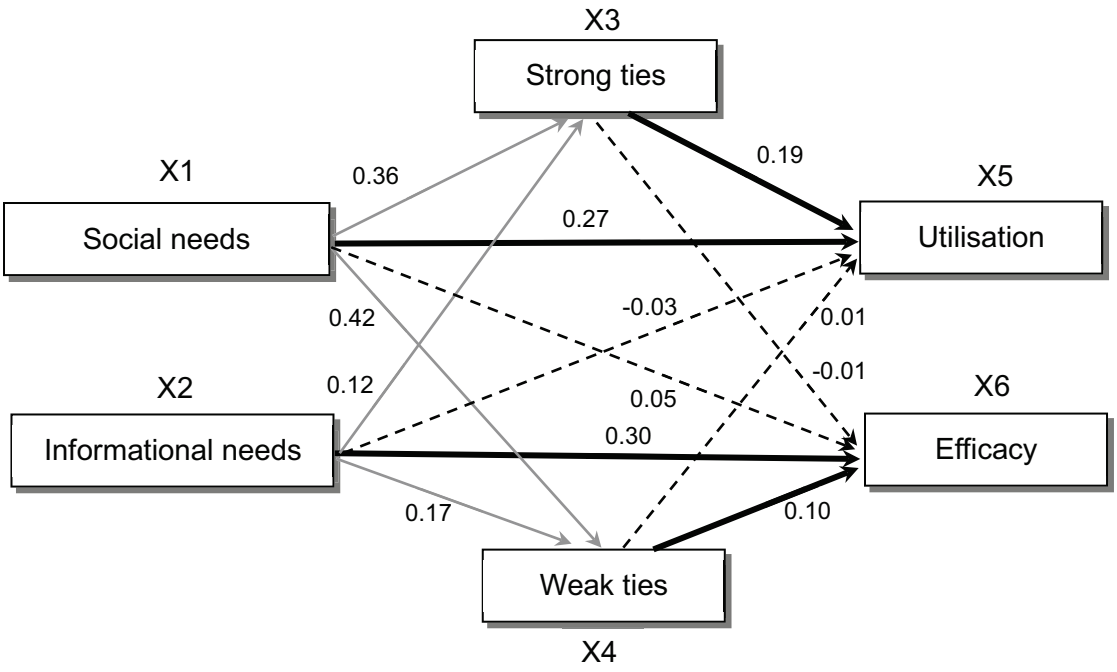


Chart V-7 has not reproduced in my version of the chapter. Dr Babb wants more explanation and interpretation of the numbers in the chart. The same applies to the following Table V-7.

Chart V-7 shows three types of line: *dotted line* standing for the paths representing rejected hypotheses; *solid line* for the paths hypothesised but not discussed in this section; and *emboldened solid line* for the relationships in questions. In the figure, each line is accompanied by standardised regression weight. The dissected values of each effect are calculated as Table V-7 below presents.

Table V-7 Dissected Value of the Effects among Motives, Ties and Engagement

Effect	x1x3	**x1x5**	x1x6	x1x4	x2x4	**x2x6**	x2x5	x2x3	**x3x5**	x3x6	**x4x6**	x4x5
Total	0.36	**0.34**	0.09	0.42	0.17	**0.32**	-0.01	0.12	**0.19**	-0.01	**0.10**	0.02
Causal	0.36	**0.34**	0.09	0.42	0.17	**0.32**	-0.01	0.12	**0.19**	-0.01	**0.10**	0.01
Direct	0.36	**0.27**	0.05	0.42	0.17	**0.30**	-0.03	0.12	**0.19**	-0.01	**0.10**	0.01
Indirect		**0.07**	0.04			**0.02**	0.02					
Spurious									**0.00**	0.00	**0.00**	0.01

X1: social needs; X2: informational needs; X3: strong ties; X4: weak ties; X5: utilisation; X6: efficacy

The table indicates that while social needs have relatively strong effect on the variable of utilisation (X1X5: 0.34), informational needs have a strong effect on efficacy (X2X6: 0.32). Here, what attracts our attention is that social needs have a smaller direct effect on utilisation compared to the direct effect of informational needs on efficacy, but when adding indirect effect, the total effect of social needs on utilisation is greater than that of informational needs on efficacy. Social needs have stronger effect, than informational needs, on both strong ties (X1X3: 0.36) and weak ties (X1X4: 0.42). Information needs have a stronger effect on efficacy (X2X6: 0.32) than on weak (X2X4: 0.17) and strong (X2X3: 0.12) ties. Taking all these relations into consideration, I can summarise the relationships among motives, strength of ties and engagement in political opportunities as follows:

(1) In general, the variables of motive (social and informational needs) have much stronger effect than those of ties strength (strong and weak ties) on the variables of engagement in online political opportunities (utilisation and efficacy).

(2) In general, social needs of motive variables have a strong effect on

all the tie strength variables.

(3) Informational needs have much stronger effect on efficacy, than on the strength of tie and on even frequency of visiting public websites.

Considering that the concept of political opportunity originated from a branch of social movement theories, the theory of the political opportunity structure, these complex relationships of engagement in online political opportunity with motives and ties strength can be explained by using the theoretical framework of social movement and collective actions. Using the Internet for the purpose of accessing political information, contacting politicians, requesting public services and mobilising for collective actions must be regarded as forms of political activity. In particular, theories explaining individual participation in social and political activities should be useful in the discussion of what makes people participate in political activities or collective actions (McAdam and Poulsen 1993).

What accounts for individual variation in participating in political movements? Why does one individual engage in the movement while others remain inactive? An assumption can be made that some people who become involved in political action may be conditioned by psychological attributes or pre-existing attitudes. However, explaining variation in individual political participation in terms of their psychological or attitudinal factors has been elusive (McAdam and Poulsen 1993). In other words, “individual predispositions” towards movement are not sufficient to explain participation in collective action (McPhail 1971). Given this limitation of explanatory power, theorists have sought to

explain participation in terms of alternative social factors (McAdam and Poulsen 1993), reflecting the social context in which an individual decides whether she or he participate in movements[67].

Knowing somebody already involved in social movement activities is a strong predictor on whether an individual will participate in the movement. Strong and dense interpersonal networks encourage the extension of an invitation to participate and they ease the uncertainty of mobilisation (Oliver, Marwell et al. 1985; McAdam and Poulsen 1993). Oliver (1985) emphasises the importance of social ties as "indicators of subjective interest in the neighbourhood, as factors influencing the availability of solidarity incentives for participation in collective action or as factors reducing the cost of action by making communication easier" (p.604). This thesis implies that the denser and stronger ties people maintain, the more likely they are to join social movements or collective actions. Those people who are connected by strong ties will share what resources they have. Although what they have to share is limited by the resources entering the network to which they belong (Burt 2000), the high level of solidarity encourage non-participants to participate in the activities in which other members of the network have already participated. The influence of other members in such social networks, and the reaction of the actor, cannot be applied to networks supported by weak ties.

McAdam and Paulsen (1993) suggest membership in an organisation is an extension of the interpersonal social tie. Acquaintances made in the formal setting of the organisation form elaborate structures of interpersonal ties. That

is, belonging to an organisation is a good way to meet people and the probability of pulling its members into a social-movement increases by the frequency of meeting and the sense of solidarity they share. Being a member may mean establishing strong ties with other members of the organisation. Even weak ties can become strong through the membership of an organisation.

In contrast, weakly-connected relations can be broken by the force of other people's pressure on an individual. Weak ties must be useful in disseminating new information and sharing tolerance across the clusters of society (Granovetter 1973; Putnam 1993), but seem to be short of influence under which people build trust, share social support, or pull other members of society into collective actions (Wellman and Wortley 1990; Kraut, Lundmark et al. 1998). People with extensive weak ties might be more knowledgeable and informed on how to use the Internet in expanding their network and to what extent the Internet can be used as a tool for political communication. However, to know is one thing, and to act is another: they would not engage by themselves in online political opportunities or online political activities; but they still may assess highly the value of the opportunity, in some cases, much higher than those people who participate in that sort of political action and experience the real outcome of the opportunity. That may be the reason that weak ties have less effect on *utilisation* and much effect on *efficacy*.

Informational needs can be mostly found in those people who use the Internet, as asked in my questionnaire, (a) to obtain useful information, (b) read up-to-date news, (c) learn something new, and (d) make life more convenient. They

seem to be very interested in information and news but less interested in people or social networking. Even if informational needs are related to strong ties, I suspect that the association may be confined to the utility of the ties as "the source of information." That might be why informational needs have less effect on the utilisation of political opportunity. People with a high level of informational needs are likely to be exposed to much information on what can be brought about with the Internet but have less incentive to join serious discussion with others about reality. Although more study should be carried out on the issue, I would presume at this stage that informational needs encourage individuals to evaluate online political opportunity highly but do not function as promoters for taking action.

On the contrary, social needs seem to build good conditions under which people are likely to join others for action. People with social needs responded that they use the Internet (a) to meet the like-minded people, (b) to persuade others to join in what they do, (c) to ask others for help, (d) to maintain good relationships with others, and (e) to have conversations with many people. They are ready for being pulled into political activities or collective action. The social information processing model (Fulk, Steinfield et al. 1987) seems to be relevant to understanding how social cues get involved in media usage and, at least in this part of discussion, taking action with the Internet as a form of political usage of the medium. If a person may use the Internet to deliver his or her appeal to a member of the Korean National Assembly, which is in fact inspired by the person's close friends having already taken action, that person's action was taken as the outcome of objectively rational choice and

influenced by information embedded in the social context. It can be said that the person was motivated to use the Internet by social needs, by which the person can maintain good relationships with like-minded friends.

Let me interpret the complicated paths from motives and the sources of social capital to the two variables of engagement in political opportunities. While *utilisation* of online political opportunities is about specific experiences in the past, *efficacy* of the opportunities is thought to reflect individuals' general expectation which may be derived from some substantial outcomes of their deed in the past but in most cases comes from their personal conception of such forms of new political opportunities. In other words, there is a clear distinction between what we experienced in the past and what expectation we have in the future. Taking collective actions in person is different from evaluating the implication of the collective actions from the perspective of the whole society.

Strong ties are a property of interpersonal relationship among people who know each other from the past and share social support, in particular, in the offline context. Those Internet users who have predominantly strong ties tend to be involved in frequent and intensive interaction with each other within a certain scale of social network, which can encourage a small number of members of the community to ignite collective action. By contrast, *weak ties* characterise the relationships among the people who come to know each other on the Internet, which is a new form of social network. In a whole society, weak ties may function as an agent promoting *issue groups* (Bimber 1998).

Critical mass theory may help explain why strong ties are positively associated with the utilisation of online political opportunity. A critical mass has been defined as " a small segment of the population that choose to make big contribution to the collective action, while the majority do little or nothing" (Oliver, Marwell et al. 1985). This theory in sociology focuses on predicting probability, extent, and effectiveness of group action in pursuit of a public good. The theory has two sets of independent variables: the shape of the *production function* and *heterogeneity* of resources and interest in the population. The production function specifies the relationship between individuals' contributions of resources and achievement of the common good. According to the outcome of the first few units' contribution and the success of subsequent contribution, the production function divides into a *decelerating* production function and an *accelerating* one. *Interests* are the values individuals place subjectively on the public good; *resources* are the contents of individual's contribution. Heterogeneity or variations in interests and resources is believed to affect the probability, extent, and likelihood of collective action: people will make their own decision on actions in accordance with their different levels of interests and resources.

Markus (1987) applied the theory to interactive media: the widespread usage of interactive media creates universal access, a form of public good that individuals cannot be prevented from benefiting from, even if they have not contributed to it; use of the media entails reciprocal interdependence, in which earlier users are influenced by later users as well as vice versa. When a new form of media arrives, one cannot benefit from it unless others use it: achieving

these benefits derives not from an individual's independent efforts, but from other people's response to these efforts. The benefits to an individual from using an interactive medium appear proportional to the number of medium users with whom the individual communicates (Steinfield 1986).

I have attempted to interpret findings that while utilisation is affected by social needs and strong ties, perceptions of efficacy are influenced by informational needs and weak ties. Internet users with social needs as dominant motives for Internet use may be inclined to use the Internet in order to strengthen existing relationship with other members in their social networks or society. That is why they are more likely to utilise online opportunities, such as collective action. However, I assume that they might confine the scope and possibility of such opportunities to the boundary of their established networks, and some of them may be sceptical about the substantial outcomes of such opportunities. In contrast, those persons who have predominantly weak ties may be relatively free from the attachment to their existing social relations in using the Internet, and have had fewer chances to be involved in online political opportunities. They have experienced new relations with strangers so that they might expect more from the new political opportunities than those Internet users who have stayed within their existing social networks. Although some of them have never practised any online political opportunities, those people with extensive weak ties and a high degree of efficacy could be turned into active players in political processes.

5-4-3. Issue Grouping Path

Hypotheses tests confirmed the positive relationship of social needs with utilisation (γ=0.266, t=6.608) and another positive one of informational needs with efficacy (γ=0.303, t=7.378). However, the relationship of social needs with efficacy was rejected as was that of informational needs with utilisation. As noted, emotional needs have no relationship with either utilisation or efficacy.

What I will examine in this section are relationships of additional variables which are inserted in between those independent and dependent variables: *trust* in virtual community and *frequency* of visiting public websites. *Informational needs* have effect on *frequency*, with no effect on *trust*, and *social needs* have effect on *trust*, with no effect on *frequency*. In turn, frequency has effect both on utilisation and efficacy, and trust also has effect both on utilisation and efficacy. The following diagram describes the complicated relationships through Confirmatory Factor Analysis with standardised estimates, which is comparable to regression weight.

Chart V-8 Issue Grouping Paths

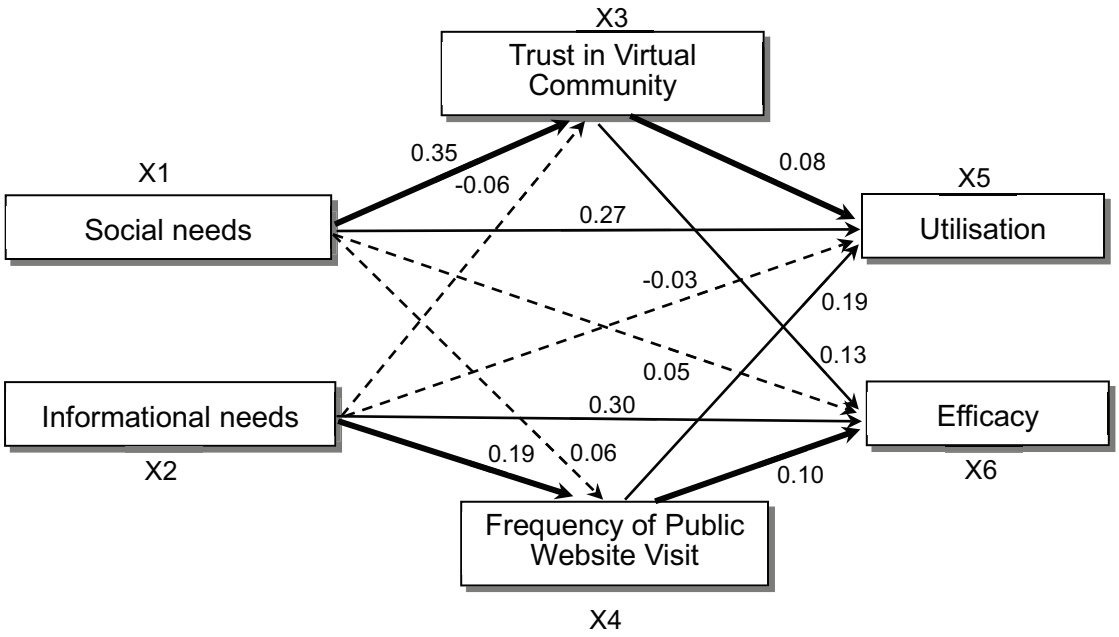


Chart V-8 shows two types of line: *dotted line* standing for the paths representing rejected hypotheses; *solid line* for the paths which are confirmed in hypothesis test. This section of discussion shed light on the relationship presented by the emboldened lines. The following table supports the figure by presenting direct and indirect effect of each variable.

Table V-8 Dissected Value of the Effects among Motives, Trust and Engagement

Effect	x1x3	**x1x5**	x1x6	x1x4	x2x4	**x2x6**	x2x5	x2x3	**x3x5**	**x3x6**	**x4x6**	**x4x5**
Total	0.35	**0.31**	0.06	0.06	0.19	**0.32**	-0.19	-0.06	**0.08**	**0.13**	**0.10**	**0.20**
Causal	0.35	**0.31**	0.06	0.06	0.19	**0.32**	-0.19	-0.06	**0.08**	**0.13**	**0.10**	**0.19**
Direct	0.35	**0.27**	0.05	0.06	0.19	**0.30**	-0.23	-0.06	**0.08**	**0.13**	**0.10**	**0.19**
Indirect		**0.04**	0.01			**0.02**	0.04					
Spurious									**0.00**	**0.00**	0.00	**0.01**

X1: social needs; X2: informational needs; X3: trust in virtual community;
X4: frequency of visiting public website; X5: utilisation; X6: efficacy

Firstly, *trust* in virtual community is influenced by *social needs,* instead of *informational needs*, the interpretation of which was attempted in the previous section of this chapter. To recapitulate, at least to Internet users in Korea, the virtual community does not seem to be the source of trusted information but to be a place for meeting with someone who was not known previously or for joining in collective action on a common issue.

Secondly, *trust* in virtual community has an effect on both *utilisation* and *efficacy* of online political opportunity (x3x5: 0.08, x3x6: 0.13). The confirmatory factor analysis provides the values of factor loading that each measurement variable has on the two factors as latent variables, *utilisation* and *efficacy*. In the analysis[68], the variable of *utilisation* has high value on the frequency of participation in collective action (λ=0.75) and the frequency of contacting politicians (λ=0.68), and efficacy variable has also high value on the evaluation of collective action (λ=0.76) and contact with politicians (λ=0.74). Such evidence may be contributory to the explanation of the finding that trust in virtual community has effects on both utilisation and efficacy of online political opportunities. In fact, political opportunities online can be understood as a set of expected outcomes drawn from the interactions between Internet users, as a type of activist, and policy-makers, as the targets of collective actions. Without trustworthiness in the interactions between the two parties, not many Internet users will seek direct contact with government or political parties.

Thirdly, the effect of the *trust* variable on *efficacy* variable (x3x6: 0.13) is slightly stronger than its effect on *utilisation* variable (x3x5: 0.08), but the causal path

shows that *social needs* influences *utilisation* (x1x5: 0.31) via *trust* in virtual community.

Fourthly, it may not be necessary to repeat discussion here about the finding that the *frequency* of visiting public sites is influenced by *informational needs*. Instead, I would like to look at the positive causal paths from the *frequency* variable to *utilisation* (x4x5:0.20) and *efficacy* (x2x6: 0.32) of online political opportunities. In the confirmatory factor analysis, the latent variable of *efficacy* has a high factor loading value (λ=0.75) in relation to the measurement variable: *Do you think that the wide access to political information the Internet makes possible will contribute to democratic development?* Given the low value of relationship between the variables of *frequency* and *efficacy* (x4x6: 0.10), those Internet users who frequently visit government websites may not necessarily believe that such political opportunities make for meaningful changes in the political process. In the same context, informational needs explain the frequency of visiting the public sites as little as the standardised value of 0.19, which shows, albeit indirectly, that those Internet users who have informational needs may not necessarily rely on public websites operated by the government.

The causal path is closely related to the unfolding trend towards an information society, and *knowledge economy*. Even if the primary purpose of going into cyber-space may be socialising, those Internet users who regularly join discussion and cyber activities are, consciously or unconsciously, seeking knowledge as well as contributing to the accumulation of collective knowledge. That is why I employed the theoretical framework for the analysis of social

capital from Nahapiet and Ghoshal's intellectual capital model, which in fact deals with organisational knowledge management.

The management of knowledge is of increasing importance to governments in their effort to deal with the growing challenges created by the knowledge economy. The essence of knowledge management is to provide strategies to get the right knowledge to the right people at the right time and in the right format. Knowledge management systems are based on the idea that an organization's most valuable resource is the knowledge of its people. The particular capabilities of organisations for creating and sharing knowledge, as described by Nahapiet and Ghoshal (1998), derive from a range of factors, including the special *facility* organisations have for the creation and transfer of tacit knowledge; the organising principles by which individual and functional expertise are structured, coordinated, and communicated; and the nature of organisations as social communities. In shifting from a society controlled by hierarchy to another type of society driven more by learning and performance, it is essential to develop a more participative form of politics and encourage people to become both more engaged and more informed. With the advent of the Internet as an enabler of a more informed and engaged society, an increasing number of people are going online and joining virtual communities, which broaden deliberation to a much wider spectrum of citizens and stakeholders and have the potential to embed these deliberations into a renewed and strengthened democratic architecture.

Many academics echo the argument that informed citizens are better citizens in

a several ways: among them, better informed citizens are more accepting of democratic norms such as political tolerance, more politically efficacious; more likely to be interested in, follow, and discuss politics; and more likely to participate in politics in a variety of ways (Carpini and Keeter 2003). Carpini and Keeter suggest that informed citizens are more likely to have opinions about the pressing issues of the day, to hold stable opinions over time, and to hold opinions that are ideologically consistent with each other. They also found that informed citizens are less likely to change their opinions in the face of tangential or misleading information but more likely to change in the face of new relevant or compelling information.

Contrary to the notion that the Internet supplants the traditional components of the democracy, it heightens their importance, empowering individuals and mediating between them and the government in the political process (Berman and Mullingan 2003). Berman and Mullingan suggest that there are the four levels of issue advocacy on the Internet: using e-mail that spreads like a virus makes it possible to bridge political as well as geographic distances and allows people divided by traditional ideologies to come together;

Blanchard and Horan (1998) suggest that social capital and civic engagement will increase when virtual communities develop around physically based communities and when these virtual communities foster additional communities of interest. Through a preliminary analysis, they identify potential communities of interest including education, exchange of general community information, and opportunities for government and political participation (Blanchard and Horan

1998).

On the other hand, the negative aspect of such virtual community, discussed in the previous section in relation to the dissemination of false information and attacking comments, needs to be addressed and controlled. It is noteworthy that Korea adopted a set of restrictions on online campaigning, as shown in the case of the Internet Election News Deliberation Commission which was established by the National Election Commission in order to monitor Internet activities with respect to violation of fairness and equity.

5-5. Political Participation of Internet Users

5-5-1. Impact of Offline Factors on Online Political Participation

So far, we have discussed the results of hypothesis tests using the structural equation modelling, which confines the variables of the model to users' behaviours and attitudes in an online situation. The SEM used DATA 2005 which contains information about people's general Internet usage and their political use of the Internet.

As many theorists have argued, however, what should not be ignored are offline factors, such as social context and existing value systems. The findings from the SEM need to be supported by more evidence about Internet users' offline lives: their offline political and social capital; and their usage of other existing media. More specifically, what impact do such factors have on people's political use of the Internet? Do offline variables affect Internet users'

engagement in online political opportunities?

The first survey in 2001 covered a comprehensive range of aspects of online behaviour, most of which used the same questions with the second survey in 2005, as well as offline factors including the elements of social capital (social trust, a sense of community, or social support), those of political capital (political trust, political interest, and political efficacy), and existing media usage (hours of TV viewing or different sections of newspaper). In the first survey, questionnaires about engagement in online political opportunities were designed to be answered in binary mode: yes or no. Treating these as dependent variables in DATA 2001, I drew up a logistic regression model to examine which offline factors affect engagement in online political opportunities.

Logistic regression is a method for determining the relationship between predictor variables and a dichotomously coded dependent variable. Using DATA 2001, as predictors or independent variables, I set three logistic regression models:

- influence of offline political capital on online political opportunity engagement;
- influence of offline social capital on online political opportunity engagement;
- influence of existing media usage on online political opportunity engagement.

Even though DATA 2001 may not be perfect for the logistic regression model, it enables a meaningful attempt to examine whether offline factors related to political capital, social capital, and the modes of existing media consumption have any impact on whether or not individual Internet user practises the online political opportunities and whether or not individual Internet user evaluate the opportunities as productive.

Influence of Offline Political Capital

The frequency of visiting public websites is likely to depend on informational needs but it then affects the utilisation and efficacy of online political opportunities. It can be assumed that the frequency reflects an individual's degree of political interest prior to her or his usage of the Internet. Literature suggests that certain causal relations exist among political interest, political activities and the actor's efforts to seek political information (McQuail 1985; Markus 1987; John 1994; Norris 2000; Pinkleton and Austin 2001). People with significant political interest are likely to use the Internet in order to obtain political information; the information is then likely to stimulate their political activities or political engagement, and such actions make them seek more political information: they might become regular users of the Internet in order to obtain diverse political information effectively. Such people are assumed to be exposed more often to online political opportunities than others less interested in politics. The similar virtuous circle can be presumed among those people with political efficacy, who in short think themselves to be a 'somebody'. In addition, political trust might encourage people to establish relationships with

government and politicians through the Internet. Based on existing literature (Fuchs, Minnite et al. 2000; Schugurensky 2000; Harwood and Lay 2001; Shah and Kwak 2001), I measured political trust (α=0.74), political efficacy (α=0.68), and political interest under the conceptual framework of political capital (Puchs, Minnite et al. 2000; Schugurensky 2000; Harwood and Lay 2001). And, I refer to them as *off-line* political capital to emphasise that this factor is not necessarily associated with the Internet.

Table V-9 Questions for Political Trust and Political Efficacy

Political Trust (α=0.74) • Generally speaking, politicians' decisions are appropriate. • Generally speaking, politicians listen to citizens' opinion. • Generally speaking, I am satisfied with the performance of the government. • Korean is a country which succeeded in democratisation. • Corruption sometimes derives from defects in the legal system.
political efficacy (α=0.68) • Generally speaking, I can understand political issues. • I have some influence on the policy making of the government. • I am competent in the discussion of political issues. • There is no channel through which public opinion is reflected by policy-making process (this item is reversed).

The following figure is a conceptual diagram showing the relationships between offline factors constituting political capital and online political opportunity engagement. That is, it is a conceptual diagram which describes the influences which people's offline political capital may have on their engagement in online political opportunities.

There may be two flows of influence: the one is a path from offline factors

directly to engagement in online political opportunities; and the other is the influence via information needs and frequency of visiting public sites. That is, those variables in the grey box are to be related based on the logistic regression analysis of Data 2001, leaving the two variables, *informational needs* and *frequency of visiting the public site*, to the assumption which may be supported by the theories reviewed in the previous chapters. It is likely, however, that those influence paths that are confined to the scope of my research are more complicated in reality with more factors involved. The structural equation model based on Data 2005 indicates that the variable of *informational needs* has effect on the *efficacy* variable, with no significant effect on utilisation variable, and that frequency of visiting public sites has effects both on efficacy and utilisation.

There are two sets of relationship between people's off-line political capital and their engagement in online political opportunities: first are the relationships involving informational needs and frequency of visiting the public sites and the second is the relationship from offline political capital directly to engagement in online political opportunities. The former is the one that may be presumed through Pippa Norris' virtuous circle thesis, and here I will make an attempt to explain the latter through the logistic regression analysis based on Data 2001.

Chart V-9 Effect of Offline Political Capital on Online Political Engagement

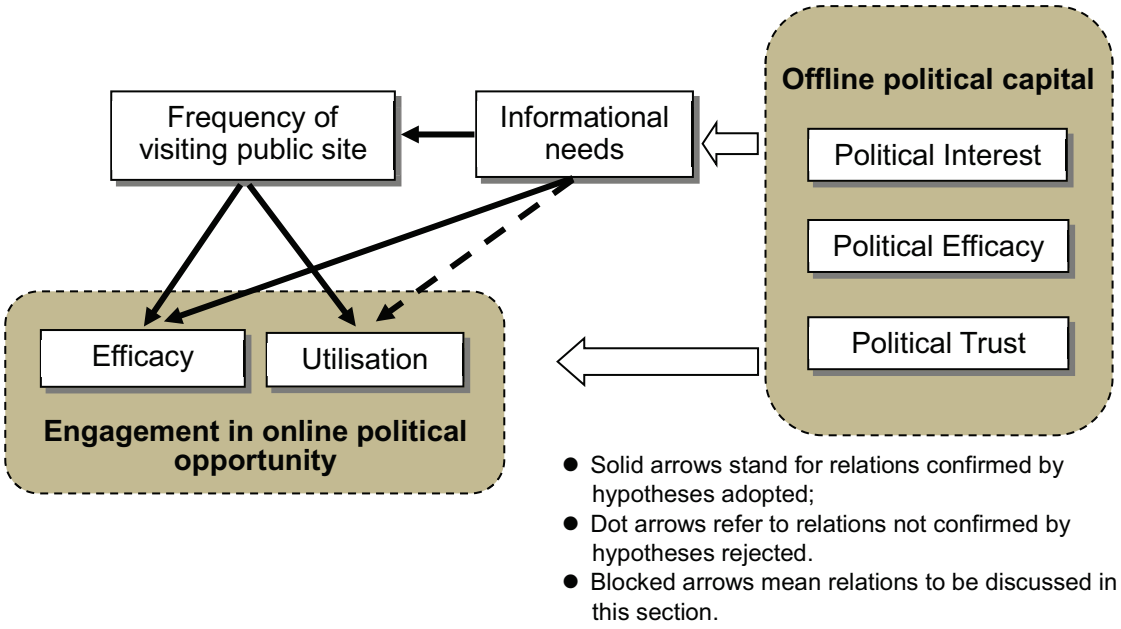


Chart V-9 shows what offline factors of political capital affect the variable of engagement in online political opportunities. The online political opportunities comprised *access to political information*, *contact with policy-makers*, *participation in collective actions*, which are listed in the far left column of the table. The online political opportunities are examined at two dimensions: utilisation and efficacy. Chart V-9 shows the variables with significant values, among three variables of offline political capital, in relation to online political opportunities at the two dimensions of utilisation and efficacy.

Table V-10 Result of Logistic Regression Model on the Impact of Offline Political Capital on Online Political Opportunity Engagement

Dependant Variables		Independent Variables (B)
Online Political Opportunities	Dimensions	
Online contact with politicians	Utilisation	Political efficacy (0.80)** Political Trust(0.29)*
	Efficacy	Political interest (0.23)** Political trust (0.42)**
Online access to political information	Utilisation	Political interest (0.25)** Political efficacy (0.59)** Political trust (0.11)*
	Efficacy	Political interest (0.24)** Political efficacy (0.30)**
Online mobilisation of collective actions	Utilisation	Political interest (0.32)** Political efficacy (0.36)**
	Efficacy	Political interest (0.23)** Political trust (0.27)**
Online use of government services	Utilisation	Political efficacy (0.28)** Political interest (0.18)*
	Efficacy	None

** p<.01, *p<.05

Table V-10 shows what offline factors of political capital affect the four elements of online political engagements at the two levels of *utilization* and *efficacy.* The four elements of online political engagement in two different dimensions of utilisation and efficacy are listed in the left column of the table: online access to political information, online contact with policy-makers, online mobilisation of collective action, and online use of government service.

Stepwise variable selection method was applied to get the significant

explanatory variables of offline political capital with the significant level of 5% and 1% and the estimated standardized beta coefficient of only significant variables is shown. The corresponding p-value is shown in the parenthesis. The plus sign of beta coefficients means the increased probability of internet users utilizing the corresponding element of online political opportunities or evaluating the opportunities as productive. The magnitude of the beta coefficient is corresponding to the probability of being online political participation. In online access to political information at the dimension of utilization, for example, the influence of (offline) political efficacy is about 2 times higher than the variable of political interest.

While the variable of *political efficacy* has relationship with all elements at the level of utilisation, political interest has influence on all elements of online political opportunity at the level of efficacy except for online use of government services. This finding may imply that individuals who score positively on political efficacy are more likely to use the Internet actively to participate in virtual communities and expect some form of outcome from their online activities. Generally speaking, it can be said that all the variables of offline political capital tend to take an important role in Internet users' engagement in online political opportunities.

Influence of Offline Social Capital

The SEM analysis of DATA 2005 shows the somewhat complicated relationships of weak and strong ties on engagement in online political opportunities: while weak ties have effect on the efficacy of online political

opportunity, strong ties have effect on the utilisation of the opportunity. Social and informational needs have effect on both ties with differences in weight: social needs have stronger effect on both ties than informational needs. Strong ties *at least in my research* are rooted in existing face-to-face relationships, such as relations with family members, old friends, or the members of associations. In contrast, weak ties are dominant in the relations which are intended for benefits, such as seeking new information externally, help, or some other instrumental outcome. In other words, strongly tied persons are more interested in their *relations* themselves than are weakly tied persons, who are motivated by the *utility* of their relations. It may be possible to postulate that strongly-tied persons are more likely to use the Internet to support off-line social networks than weakly tied persons.

I measured social trust, norms of cooperation (α=0.63), a sense of community (α=0.88), and life contentment (α=0.74) under the concept of social capital. Most of the factors seem to have effect on interpersonal ties, and, in particular, on strong ties through which people exchange social support (Wellman and Wortley 1990).

Table V-11 Questions for Norms of Cooperation, A Sense of Community and Life Contentment

Norms of cooperation (α=0.63) • It is important to live in harmony in the organisations or village I belong to. • I do not change my view although it differs from other peoples (reversed direction). • I often sacrifice my interest for the sake of my organisations. • I can get along with people who come from regions or groups competitive with mine. • My colleagues are trying to help me.
A sense of community (α=0.88) • I know almost all the people of the village where I live. • The village is important to my daily life. • I have a sense of belonging to the village. • I have a great deal of attachment to the village. • Villagers are trying to help me.
Life contentment (α=0.74) • I am satisfied with my life these days. • I want to live another life away from reality (reversed direction). • I wish I could live differently from now in another world. • I sometimes think my life is out of control.

Chart V-10 describes conceptual relationships between some variables constituting Internet users' off-line social capital and their engagement in online political opportunities. In both surveys in 2001 and in 2005, the questionnaires were designed to the same conceptual framework that online political opportunities are constituted by four elements and measured at two dimensions of utilisation and efficacy; *whether or not to use the opportunities* and *whether or not to think them useful*. Whereas the survey in 2005 used Likert scales, questionnaires in 2001 used categorical responses. That makes it possible to analyse the data by the logistic regression model. In addition, as the evidences in the SEM shows, the ties of interpersonal relationships influence people's

engagement in online political opportunities. Logistic regression analysis was applied to the relationship between the variables of offline social capital and online political opportunities, all of which are in the grey box.

Chart V-10 the Effect of Off-Line Social Capital on On-line

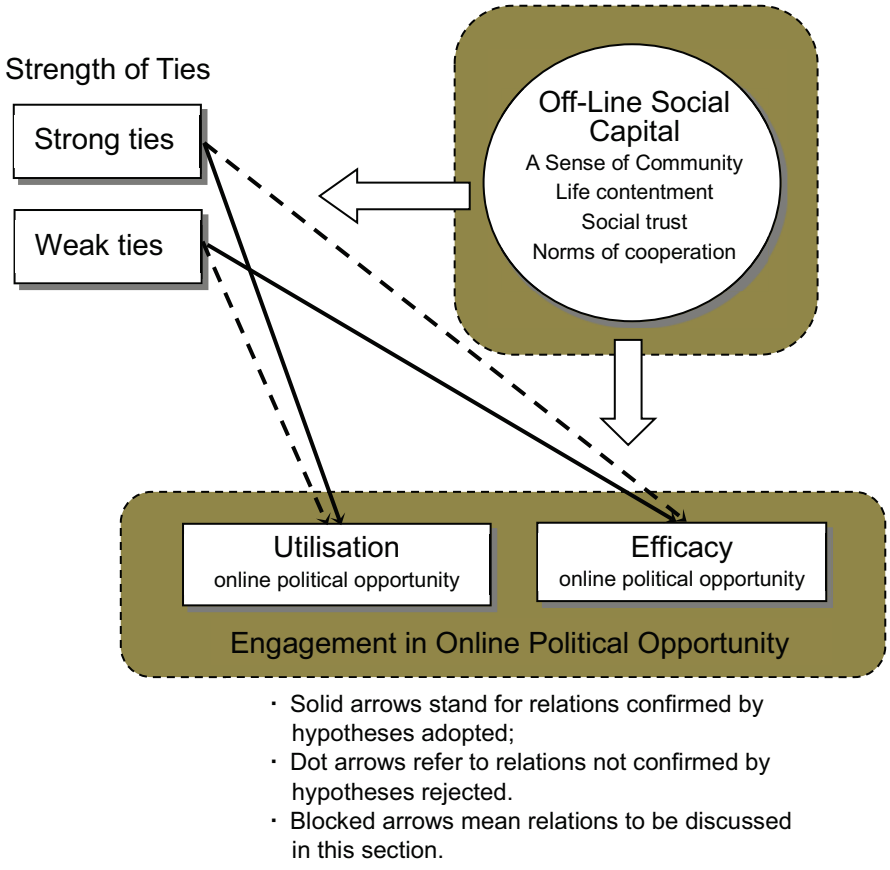


Table V-11 summarises the result of the logistic regression analyses on the relationship between off-line social capital and engagement in online political opportunities. The four indicators of the online political opportunities, put in the far left column of the table are measured at the two levels, *utilisation* and *efficacy*. The table shows what factors of off-line social capital have effect on

the opportunities at the two levels.

Table V-12 Result of Logistic Regression Model on the Impact of Offline Social Capital on Online Political Opportunity Engagement (DATA 2001)

Dependant Variables		Independent Variables(B)
Online Political Opportunities	Dimensions	
Online contact with politicians	Utilisation	Social trust (0.48)* Community (0.24)*
	Efficacy	Cooperation (0.35)** Community (0.13)* Contentment (0.20)*
Online access to political information	Utilisation	Cooperation (0.32)*
	Efficacy	Cooperation (0.47)**
Online mobilisation of collective actions	Utilisation	Social trust (0.40)** Cooperation (0.32)*
	Efficacy	Cooperation (0.51)** Contentment (0.25)**
Online use of government services	Utilisation	Social trust (0.47)** Cooperation (0.37)**
	Efficacy	Cooperation (0.42)** Social trust (0.28)*

** p<.01, *p<.05

Stepwise variable selection method was applied to get the significant explanatory variables of offline political capital with the significant level of 5% and the estimated standardized beta coefficient only of significant variables is shown. The corresponding p-value is shown in the parenthesis. According to the table, while the variable of life contentment has influence mostly on the utilization of online political opportunities, a norm of cooperation has influence on online political engagement at the efficacy level.

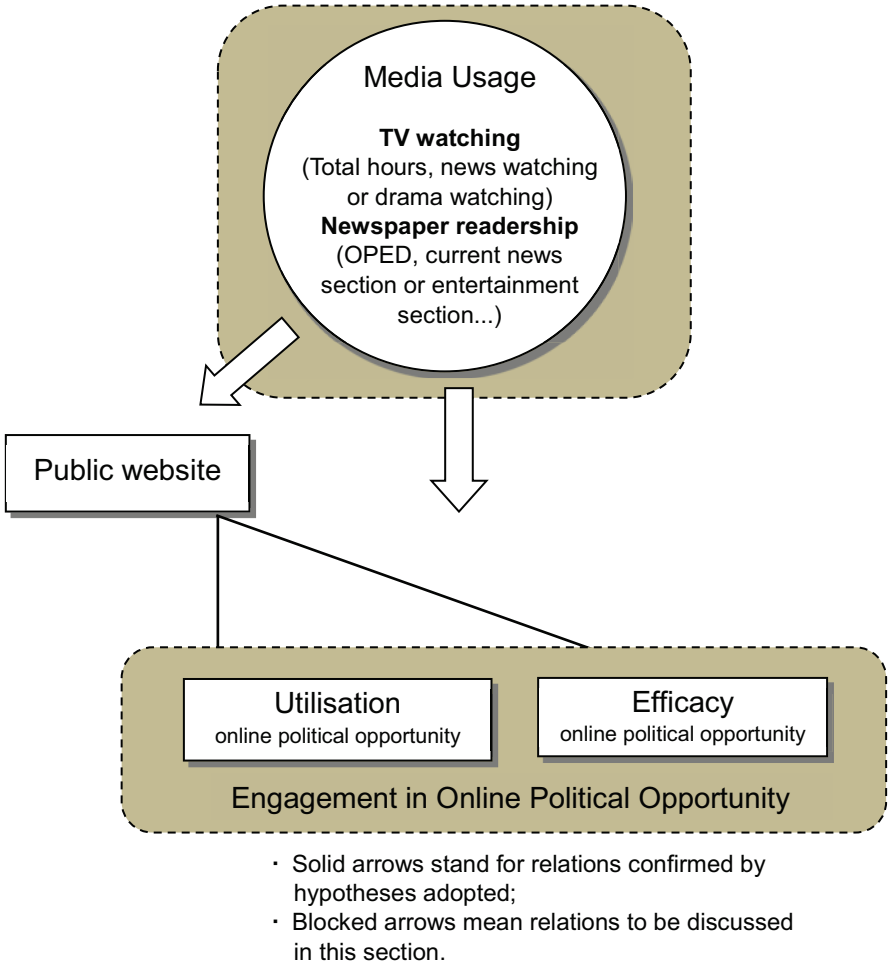
Life contentment was measured by the four questions: *I am satisfied with my life these days*; *I want to get away from everyday reality*; *I wish I could live differently from now in another world*; and *I sometimes think my life is out of my control*. Responses were reversed where appropriate, and an additive index was created. This approach shares an assumption with Shah, Kwak and Holbert (2001), in which individuals are understood to comprise communities, and their attitudes and behaviours in relation to each other ultimately shape the quality of civic life. Life contentment, as a personal asset of community life, is regarded as one of key indicators of social capital (Shah and Kwak 2001). The results of logistic regression analysis suggest that those who are satisfied with their lives and willing to solve problems are more likely to use online political opportunities than those who feel pressured to escape their real lives.

A norm of cooperation is measured by five questions: *It is important to live in harmony with organisations or within the village I belong to*; *I do not yield my position even if it differs from other people's views*.; *I often sacrifice my interest for the sake of my organisation*; *I can get along with people who come from regions or groups competing with mine*; and *My colleagues are trying to help me*. Efficacy of online political opportunities is the variable to indicate whether or not the respondents think the various items of online political opportunities actually contribute to making political processes work better. The result of the analysis suggests that those who are tolerant and affirmative are likely to be optimistic concerning online political opportunities.

Influence of Other Existing Media Usage

As Chart V-11 describes, the mode of media consumption is said to affect people's engagement in online political opportunities. Wyatt and Katz (2000) suggest that engaging in political conversation is significantly correlated with the quality of individual opinion and political participation. The quality of opinion can be defined as holding more developed opinions on specific political issues. While it has been said that TV watching, in particular watching entertainment programmes such as soap operas , may cause political participation to decline, reading hard news, such as articles in the OP-ED section of a newspaper, may encourage readers to seek for more political information and participate in the political process (Norris 2000). Using the logistic regression model, I examined the influence of the usage of traditional offline media on engagement in online political opportunities.

Chart V-11 Effect of Existing Media Usage on Online Political Opportunities



Some statistical evidence s indicates that Internet use is less negatively related with newspaper reading than TV watching. According to the survey on the computer and Internet usage (MIC and NIDA 2008) in Korea, the population aged 3 and over tends to watch TV for an average 18 hours per week. Among them, Internet users spend less time (15.8 hours) viewing TV than Internet non-users (24.8 hours). Among the sub group watching TV for '31 hours and more', Internet users comprise only 6.1%, compared to 26.2% for Internet non-users.

Newspaper readers spend a weekly average of 3.5 hours reading newspapers, with little difference between Internet users (3.5 hours) and non-users (3.4 hours). More than half of Internet users (55.5%) do not read newspapers whereas over three quarters (77.9%) of Internet non-users do not read newspapers. Two thirds of the population aged more than 6 claim to have read newspaper articles online.

Table V-13 Result of Logistic Regression Model on the Impact of Offline Political Capital on Online Political Opportunity Engagement (DATA 2001)

Dependant Variables		Independent Variables(B)
Online Political Opportunities	Dimensions	
Online contact with politicians	Utilisation	TV Hour (0.07)** Paper (OP-ED) (0.30)** Paper (Entertainment)(0.33)** Paper (current news)(0.29)**
	Efficacy	Paper (current news)(0.20)*
Online access to political information	Utilisation	Paper (OP-ED) (0.41)** Paper (current news)(0.22)*
	Efficacy	Paper (current news)(0.29)** TV Hour (0.06)* Paper (Entertainment)(0.17)*
Online mobilisation of collective actions	Utilisation	TV Drama (0.21)* Paper (OP-ED) (0.22)*
	Efficacy	None
Online use of government services	Utilisation	Paper (OP-ED) (0.19)*
	Efficacy	Paper (current news) (0.29)** TV Hour (0.06)* Paper (Entertainment)(0.17)*

** p<.01, *p<.05

Table V-13 shows relationship between existing media consumption and the four elements of online political engagements at the two dimensions of utilization and efficacy. The table presents only variables of media consumption which have significant value at the two levels. In the survey in 2001, I measured 5 types of media consumption: the opinion and editorial (OP-ED) page of the newspaper, the main news pages of the paper, the entertainment section of paper, TV news, and TV drama.

Stepwise variable selection method was applied to get the significant explanatory variables of offline political capital with the significant level of 5% and the estimated standardized beta coefficient of only significant variables is shown. The corresponding p-value is shown in the parenthesis. The table indicates that reading the OP-ED page of a newspaper has influence on all the variables of online political opportunities engagement at the utilization level. Reading the main news pages of a newspaper has relationship on online political opportunities engagement at the efficacy level.

In the offline context, political engagement is positively associated with the perceived importance of newspapers and radio talk shows but negatively related to the cynical tone of political news and political campaign (Pinkleton and Austin 2001). The result of the logistic regression analysis of DATA 2001 suggests that the tone and quality of political news may be a key factor affecting political participation. Reading hard news and editorials is believed to make people more knowledgeable regarding the common interest and public issues, and arguably encouraging people to join issue groups. On the contrary,

reading the entertainment pages of newspapers takes readers attention away from community issues and arguably leaves them uninterested in politics. I would argue that the virtuous circle thesis (Norris 2000) can be applied to the relationship between traditional media consumption and engagement in online political opportunities: those people who are interested in politics for whatever reason will read articles written by newspaper journalists and then seek out official documents or more detailed information on the subjects they are interested in on the Internet. That may be why the variable of OP-ED, the opinion and editorial sections of newspapers, has an effect on the utilisation of online political opportunities, most of which measures individuals' activeness, for example, in seeking out political information or politicians' responses. Efficacy seems to be a different issue in that opinion and editorial comment does not appear to have a significant impact on the variables on the level of efficacy. With the given data, it may be difficult to explain the difference between the influence of OP-ED and the main news pages of newspapers in relation to engagement in online political opportunities. However, the variable of current news shows a significant impact.

5-5-2. Impact of Online Factors on Off-line Turnout

The last task is to examine the impact of online factors on off-line voting. This may not be the main part of my research, which focuses on the causal relationships between online factors, but the analysis will help understand more fully the implications of online factors. I would like to focus on two points ~~on~~ in relation to this subject: the one is to examine the turnout rate of each cluster,

which was grouped by key online variables; the other is to identify what online factors affect off-line voting.

Firstly, do those positive factors in creating social capital and engaging in political opportunities contribute to an increase in turnout rate? Do the two variables of emotional needs and entertainment sites have a negative impact on voting?

As many analysts in United Kingdom and United States have sought to do regarding their national elections, Korean experts have investigated the impact of the Internet on voting, the key element of the democratic political process. In particular, some Korean academics suggest a positive effect on the relationship between Internet use and turnout rate (Kim and Yoon 2000; Park 2000; Ra 2000; Lew, Lee et al. 2005). For example, Kim and Yoon (2000) report that about 79% of those who had visited political websites more than 5 times during the campaign season voted in the Korean 2000 General Election. This figure is considerably higher than the national average of turnout, 57%, in the election, and higher still compared with voting rate among those have never gone online, 50%.

In the relationship between online behaviour and off-line political actions, it is necessary to clarify the scope of political activities online: whether political activities include the acquisition of political information and the accumulation of political knowledge?; or whether they should be confined to specific activities, such as posting instant comments on political issues or joining web-based political discussions? Within a narrow scope of political activities, there may be

no significant relationship between online political activities and off-line political participation, such as voting. By contrast, including a broad scope of online political activities involving reading political news online, the online factor has a positive association with voting (Lew, Lee et al. 2005). In the off-line context, in fact, media consumption, such as reading newspapers or watching TV, may be quite unrelated to political participation, but activities such as reading political articles online may be a form of political engagement in that people engaging in such activities can move with little effort to posting political comments or participating in political fund-raising. The discussion here employs the broad scope of online political activities.

Table V-14 Turnout Rate by the Cluster of Online Factors (DATA 2005)

Cluster (number of cases)	Presidential Election 2002 (%)	General Election 2004 (%)
Emotional needs (296)	81	77
Informational needs (417)	83	80
Social needs (29)	69	69
Strong ties (274)	78	77
Weak ties (468)	84	79
Entertainment sites (544)	81	78
Public sites (198)	84	80

Table V-14 shows the proportion of the respondents in each on-line group clustered by the seven key variables, which participated in the 2004 General Election and in the 2002 Presidential Election. Statistically, first of all, there is

no significant difference in the turnout rate of Internet users in both elections. However, the reason I present this table is to draw attention to the fact that the clusters of *emotional needs* and *entertainment sites* do not show low turnout rate in national elections compared to other clusters which are believed to be rich in social capital. Two ways of interpretation seem possible: firstly, motives for Internet use may have less significant bearing on off-line political participation; and, secondly, there may be a generational factor, in that younger generations are more likely to use Internet media for entertainment, but are not necessarily politically disengaged. I would like to stress the latter one; a new perspective toward generational difference in media consumption.

> *….Net Geners (generation) are smarter, quicker, and more tolerant of diversity than their predecessors. They care strongly about justice and the problems faced by their society and are typically engaged in some kind of civic activity at school, at work, or in their communities. Recently in the United States, hundreds of thousands of them have been inspired by Barack Obama's run for the presidency and have gotten involved in politics for the first time. This generation is engaging politically and sees democracy and government as key tools for improving the world.*"
> (Tapscott 2009: 6)

Analysing the generational differences is beyond the scope of my research. Internet capacity is not in fact a simple linear function of economic and political development, but rather is driven by a syndrome of complex interactions that could aptly be termed "post-industrialism" (Robinson and Crenshaw 1999). In

the first chapter, I argued that wide spread Internet use throughout all corners of a society may contribute to what Inglehart (1997) describes as a post-modernisation value shift. Post-modernisation has been compared to modernisation as a process that increases the economic capabilities through industrialisation and political capabilities through bureaucratisation (Inglehart 1997). Inglehart (1997) provides cross-national evidence to argue that the value shifts have progressed gradually and consistently;

> *"There are far more post-materialists in the United States and the European Union than in South Korea, but the slope rises steeply in South Korea, suggesting that a very rapid process of intergenerational changes is taking place."* (Inglehart 1997)

It may be an exaggeration to say that the Internet accelerates the process of post-modernisation by changing the ways of communication: "the *magic* of the Internet is that it is a technology that puts cultural acts, symbolizations in all forms, in the hands of all participants; it radically decentralizes the status and activities of speech, publishing, filmmaking, radio and television broadcasting, in short the apparatuses of cultural production" (Poster 1995). Generally speaking, the Internet provides more functions to meet *emotional needs* than other traditional media which have satisfied social and informational needs; the telephone met *social needs* by enabling people to socialise at a distance, and TV or newspapers meet *informational needs* by providing news. Emotional needs may not only be expressed through entertainment outlets or escape from reality any more. Complex psychological factors may underlie the new attitudes and behaviours of the Net Generation (Tapscott 2009). More in-depth studies

seem to be required in relation to the post-modernisation of society.

Secondly, what online factors are involved in off-line voting in the two elections? What variables are determinants in Internet users' voting? I conducted logistic regression analysis in order to confirm what independent variables, all of which were used in the structural equation model, affect Internet users' turnout in the 2002 Korean presidential election and the 2004 general election. In the logistic regression model, a positive regression coefficient means that that the explanatory variable increases the probability of the outcome, while a negative regression coefficient means that the variable in question decreases the probability of that outcome; a large regression coefficient means that the risk factor strongly influences the probability of that outcome; while a near-zero regression coefficient means that that risk factor has little influence on the probability of that outcome. Logistic regression is used to describe the relationship between ten independent variables (the three variables of motive for Internet use, the five variables of social capital sources, and the two variables of engagement in online political opportunities) and a binary response variable, *yes* or *no*, of voting in each election.

In fact, there is no theoretical foundation to connect those variables of Internet users' online behaviours and their voting. My research does not include the study of voting behaviour, in which field a huge amount of academic knowledge has been accumulated by many political scientists. As I put it previously, my research confines the conceptual scope of political participation to engagement in online political opportunities. Nevertheless, linking the online factors to off-line political participation, in particular, turnout in political elections as a form of

representative political participation, will make it possible to understand the implications of the outcome of the structural equation model in the context of real political processes.

For a brief review of key theories on voting behaviour, I would like to introduce a formula to explain what determinants are involved in individual voting decisions. Riker and Ordeshook (1968) proposed the formula, PB + D > C: P is the probability that an individual's vote will affect the outcome of an election; B is the perceived benefit of that person's favoured political party or candidate being elected; D originally stood for democracy or civic duty, but today represents any social or personal gratification an individual gets from voting; and C is the time, effort, and financial cost involved in voting. Since P is virtually zero in most elections, PB is also near zero, and D is thus the most important element in motivating people to vote. For a person to vote, these factors must outweigh C. They developed the modern understanding of D, proposing the five major forms of gratification that people receive for voting: complying with the social obligation to vote; affirming one's allegiance to the political system; affirming a partisan preference; affirming one's importance to the political system; and, for those who find politics interesting and entertaining, researching and making a decision (Riker and Ordeshook 1968).

In the logistic regression model, a backward selection method is applied to get the significant variables. Table V-15 and Table V-16 provide independent variables having significant value on voting in the 2002 Presidential Election and 2004 General Election respectively. As Table V-14 shows, in the

presidential election, *weak tie* and *utilisation* have a positive effect on voting and *strong tie* has negative effect on voting. Table V-15 presents the positive effect that the utilisation variable has on voting in General Election 2004, which is similar in value with that in Presidential Election 2002 (0.308≈0.312). Comparing the two tables reveals that the effect of strong ties on voting in the presidential election is greater than that on voting in the general election. (|-0.49|>|-0.14|).

Table V-15

Summary of Maximum Likelihood Estimates in Presidential Election 2002

Parameter	DF	Estimate	Standard	Wald Chi-Square	p-value
Intercept	1	1.159	0.4796	5.779	0.0162
Weak ties	1	0.298	0.1117	7.134	0.0076
Strong ties	1	-0.490	0.1280	14.648	0.0001
Utilisation	1	0.312	0.0893	12.177	0.0005

Table V-16

Summary of Maximum Likelihood Estimates Analysis in General Election 2004

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	p-value
Intercept	1	0.7677	0.4229	3.2954	0.0695
Strong ties	1	-0.1432	0.0876	2.6737	0.1020
Utilisation		0.3080	0.0830	13.7817	0.0002

It may be understandable that those who use online political opportunities actively and frequently are willing to spend time and energy going to the ballot

box. However, it is difficult to explain the finding that the strength of interpersonal ties has a contrary effect on voting. My guess is that, in the formula, $PB + D > C$, some agents driven by the strength of interpersonal ties may influence D, which Riker and Ordeshook (1968) proposed as the major forms of gratification that people receive for voting: complying with the social obligation to vote; affirming one's allegiance to the political system; affirming a partisan preference; affirming one's importance to the political system; and, for those who find politics interesting and entertaining, researching and making a decision.

5-6. Summary and Conclusion

A key feature of my research design is to set up the *sources* of social capital and a set of *conditions* under which social capital is most likely to be created. The sources are *public websites* at the cognitive dimension, *social network* at the relational dimension, and *trust* in virtual community at the structural dimension. The conditions for the creation of social capital are established in accordance with the three dimensions: the first condition involves in the cognitive dimension a high frequency of visiting public sites and low frequency of visiting entertainment ones; the second condition at the relational dimension is comprised the level of strong and weak ties; and the third condition is the level of trust in virtual community at the structural dimensions. The variables that explain the conditions with significant value in the causal relationships are *informational* and *social needs*. The cluster analysis shows that the proportion of those Internet users who are motivated predominantly by the internal factors

is 60% of the total sample, leading to the argument that, under the assumption that the samples are normally distributed, two thirds of Internet users in Korea are creating social capital through Internet use. However, I've made a brief attempt to draw attention to the other side of my argument: emotional needs do not necessarily have negative impact on making the political process working.

My subject, the *political anatomy of Internet users*, requires the examination of individual behaviours and attitudes from the perspective of participatory democracy. Internet users have been given wider opportunities for political participation, which I termed *online political opportunities*. I set up activeness and positiveness regarding the online political opportunities as indicators of an individual's general propensity and orientation toward the political opportunities. The variable of *utilisation* represents activeness and the variable of *efficacy* does so for positiveness. The political anatomy of Internet users seeks to answer the question: who are active and positive on online political opportunities? Considerable effort has been concentrated on identifying factors affecting the two indicators through the path analyses of the structural equation model. Factors have been divided into two groups; internal motives and explicit behaviours on the sources of social capital. *Trust* in virtual community and *frequency* of visiting public sites of course have influence on both variables of engagement in online political opportunities with minimal difference. However, the paths from motives and social capital sources to the variables of engagement in the opportunities would seem to be rather complicated. While *utilisation* of the opportunities is affected only by *social needs* and *strong ties*,

efficacy of the opportunities is affected only by *informational needs* and *weak ties*.

The findings in fact were not expected in the stage of the research design but may explain correctly the behaviours of Korean Internet users who maintain strong relationships based on affective linkages, most of which are arguably motivated by social needs. Those people on a closed network of strong interpersonal ties and motivated by social needs are more likely to actively practise online political opportunities, such as sending e-mail to the president or joining a cyber-demonstration. Perhaps paradoxically, the more actively they are involved in such collective actions, the more cynical or sceptical they may become about the utility of such opportunities in fundamentally solving social and political problems. It is not certain, however, that such interpretation is valid regarding the lower turnout among people who have dominantly strong ties in the Presidential Election 2002 and General Election 2004.

Chapter VI Conclusion

6-1. Overview on the Results of the Research

As I put it in the introduction, the aim of my research is to examine the behaviours and attitudes of Korean Internet users as actors in the democratic political process. Are they productive in the creation of social capital? Are they active in political participation in its online forms? In what way do they assess the outcome of their participation? Specifically, a large part of my attention has been concentrated on causal relationships between internal motives for Internet use, as exogenous variables, and a set of conditions that are composed of Internet users' behaviours on the sources of social capital, under which social capital is most likely to be created. And I examined the political implications of the causal relationships by linking those variables to Internet users' engagement in political opportunities. The analyses of the model demonstrated that two thirds of the respondents may be motivated dominantly by the factors involved in causal relationships with the sources of social capital and with political engagement actively and positively.

Let me revisit some points that we need to pay attention to. Firstly, at least within the scope of my own literature review, there seems to be no convincing definition of social capital in the online context, which could provide a reference framework for my study. What is the substance of social capital, in particular, when it comes to cyber-space? In some way, that fact encouraged me to attempt an operational definition for my research after considering a wide range of established theories and theses.

In fact, the model for my research is a synthesis of a variety of theories and theses, which sought to incorporate as many aspects as possible of Internet users' behaviours and attitudes. The independent variables were set up based on the theory of use and gratification with which human behaviour and attitudes are more effectively explained than the traditional methodology of Internet study using the duration of Internet use or frequency of login. Putnam and other social capital theorists inspired me with the idea of the concept, in particular, on the sources of social capital. I employed the framework suggested by Nahipet and Ghoshal in understanding the sources of social capital in terms of the three dimensions. Furthermore, I relied on contributions from many theorists: the virtuous circle thesis of Norris for explaining Internet users' behaviour on visiting public websites; Fulk et al's social information processing model for understanding the source of social capital at the cognitive dimension; Granovetter's theory of the strength of interpersonal ties for analysing the sources of social capital at the relational dimension; and the arguments by several theorists for assessing the quality of virtual community in terms of the public sphere. The theory of political opportunity structure is of importance in setting the variables of engagement in online political opportunities: utilisation and efficacy. Boix and Posner's model for the functions of social capital in political process provides an analytical framework through which political implication of Internet use can be examined.

Secondly, I could confirm that many factors are involved in Internet users' behaviours. Different people react to the new medium in different ways. My research does not only confirm the theoretically assumed relationships but also

presents substantial new findings, which in fact reveal in some detail the properties of the known relationships. What makes people use the Internet? My study supported other researchers' findings and arguments by providing the three factors which are believed to involve an individuals' adoption of the Internet and its usage. Such factors proved to explain in a consistent way Internet users' behaviour and attitudes on the sources of social capital and online political opportunities. In other words, I could identify the paths through which the Internet exerts its influence on creation of social capital. Those analysts who have claimed that the Internet turns people away from the public sphere and destroy social capital (Kraut, Lundmark et al. 1998) cannot explain the case in which citizens' collective movements, which were basically based on Internet communication, successfully persuaded voters not to elect some candidates as members of the National Assembly in Korea. On the other hand, those theorists who look on the bright side of the Internet (Rheingold 1993) cannot provide a convincing explanation about what some Korean journalists call 'cyber killers', who disseminate groundless rumours sometimes leading to suicide by celebrity victims. My research confirmed that those Internet users motivated dominantly by social and informational needs are more likely to create social capital and engage in online political opportunities than those whose use of the internet is motivated primarily by emotional needs.

Thirdly, attention needs to be paid to the finding that the Internet facilitates people in developing strong as well as weak ties of interpersonal relationships. Two thirds of the respondents tend to develop a new and active social network, basically supported by weak ties. Given the fact that the direction of the two

variables, strong and weak ties, are the same, those Internet users who are good at maintaining strong ties tend also to be rich in the weak ties of interpersonal relationships. Furthermore, I've learned in the course of my research that, unlike the classical social capital theories which regards the quality of social capital as given, the Internet may have influence across the bonding or bridging social capital: the Internet can initiate bridging social capital based on the weak ties of relationships among people from different backgrounds and then strengthen those ties into strong ties constituting bonding social capital through off-line gatherings and collaboration in collective actions. Conversely, it may be possible that the Internet transforms some users initially in tightly bounded networks into more tolerant behaviour toward outsiders by facilitating recruitment of new members and exchanging new information.

Wellman et al (1990; 2001) claimed that Internet use supplements both *network capital* and *participatory capital* by extending existing levels of face-to-face and telephone contact. The more people are on the Internet, and the more they are involved in corresponding online organisational and political activities, the more they are involved in offline organisational and political activities. Conversely, people already participating in offline activities will use the Internet to augment and extend their participation. People already participating online will get more involved in-person with organisations and politics. Haythornthwaite (2005) suggested the concept of latent tie to explain those social network ties that are "technically possible but not activated socially" (p. 137). Technologies may transform those latent ties into weak ties and, as the case of DC Inside shows,

weak tie relationships may be turned into strong tie relationships through off-line gatherings and through other means for exchanging social support. All in all, the internet facilitates its users effectively managing their online as well as off-line social networks.

Lastly, my research concluded that emotional needs and entertainment websites undermine the building of social capital and other positive effects of Internet use. However, I would confess that my model may strengthen slightly a kind of prejudice in explaining the two variables. In practice, it may be positive that the Internet lets people satisfy emotional needs and enjoy entertainment. Such factors may contribute to establishment of social support or life contentment, which constitute social capital even in the notion of classical social capital theory.

As my data show, the younger Internet users are, the more likely they are prioritise their emotional needs and the more frequently they tend to visit entertainment websites. The younger generation, represented by *Net Generation* (Tapscott 2009), need to be understood from a new perspective. Tapscott (2009) describes them as smarter, quicker, and more tolerant of diversity than their predecessors but who also care strongly about justice and the problems faced by their society and are typically engaged in some kind of civic activity at school or college. The Network Generation tend to spend much of their time staying online, without distinguishing between online and offline life. Entertainment opportunities online may not be something harmful to the network generation but a way of leisure activities, just like hunting or dancing in

traditional society. These days, many portal sites, such as Google or Naver, provide a variety of contents mixing entertainment elements with more serious social issues catering to the taste of the network generation.

Arguably, such websites, even if my analysis terms them as entertainment sites, do not necessarily seduce younger generations away from civic life or reduce chances for the creation of social capital. In addition, meeting users' emotional needs may not necessarily be harmful to their civic life and social capital.

6-2. Political Implication of Social Capital Online

In Chapter II, I proposed a definition of social capital which I thought operational in the context of Internet based society:

> *Social resources in a form of individuals' readiness and willingness, acquired in the course of their use of the Internet, based on civic knowledge of public issues, on dense or loose interpersonal networks, and on trust in virtual community, which in certain situations may induce them to contribute to collective efforts to address their interests and resolve common problems.*

Based on this definition, I postulated the three sources of social capital: public websites at the cognitive dimension; social network at the relational dimension; and trust in virtual community at the structural dimension. In order to understand in what way the Internet facilitates its users to create and maintain social capital, it is necessary to summarise the results of the analyses in terms of each element of this concept.

Firstly, it seems to be evident that the Internet helps people to be knowledgeable on common interests and public issues. The Internet users who more frequently visit public websites are more likely to create social capital than those users who frequently visit entertainment websites because the former group of Internet users are likely to become knowledgeable on public issues and to take an enlightened view on matters of common interest. They proved to be very active in consuming online information about political affairs, contacting political leaders by emails, joining collective actions, and requesting online delivery of public services. They are likely to be positive in evaluating the outcome of the opportunities available by the Internet. Their behaviours proved to be motivated internally by informational needs.

Secondly, the Internet facilitates its users only not to create new social networks but also to maintain existing network. Internet users can only not recover relationships with old friends but also establish new relationships with people previously unknown but who may share common issues and interest. Strong ties, which I refer to as a property of the old, usually offline, relationships, seem to stimulate Internet users to practise online opportunities to access political information, send email to political leaders, or mobilise collective actions. It could be argued that such utilisation of online political opportunities may be activated by their subjective calculation of expected outcome compared to the amount of the resources they would contribute. On the contrary, we found that they are not very positive in evaluating the functions of the opportunities in the whole political process. People connected with each other by strong ties may tend to be rewarded for their collective actions with relatively

direct and instant responses from governments or political parties. On the matters beyond the capability of the governments, most of which need fundamental changes, for example, in the system, however, they may fail to obtain the anticipated outcome. Weak ties, which I refer to a property of newer relationships, seem to encourage Internet users to expand their social networks by sharing issues and prospective visions, leading to positive evaluation of the changes that such new opportunities will bring about. Strong and weak ties of interpersonal relationships are affected by both social and informational needs (see pp.286).

Thirdly, those Internet users who trust in virtual communities are more likely to respect other members of the communities and seek to be trusted by them in cyber space. By contrast, those Internet users who do not trust in the virtual community seek to evade responsibility for their deeds by taking advantage of anonymity. As a component of social capital, trust is more important in the online context than in the off-line context in that there is no other social cue in communication than the message transmitted through the Internet. Trusting Internet users are more likely to send emails to policy-makers and join collective actions. They tend to expect that the Internet will change the political process in the direction they desire. They may be motivated by their needs to connect themselves to others, which make them behave in trustful ways in the cyberspace (see Chart V-9).

Fulfilling the condition is necessary but not sufficient until an Internet user is ready for action and retains *willingness* in addressing common interest and

resolving community problems. I would like to argue that the two factors are *substances* of social capital at the individual dimension. Some elements of social capital Putman suggested, such as trust in society, social network, and a norm of reciprocity, may be prerequisites for individuals' readiness for cooperation and collective action for solving social problems. Without willingness to sacrifice time and money for such actions, nobody can accrue benefits in the form of social capital from the groups of people or society at large even if there does exist trust, norms and social networks.

In addition, Internet users' readiness does not require those elements that classic theorists have suggested, but also skills needed in operating software on the Internet. For example, Haythornthwaite 's *latent tie* (2005) is technically in existence but not activated socially (p. 137). The reason that motive factors are valid as explanatory variables may be that the factors can predict motivated users' acquisition of necessary skill in attaining their goals.

Blue State Digital, which has been portrayed as Barack Obama's secret weapon in his successful presidential campaign in 2008, provided clients with suites of computer programs that integrated tools for fundraising, advocacy, social networking, constituency development, and content management through a unified interface (http://www.bluestatedigital.com/pages/about/). His campaign stated clearly that it relied on design, technology and strategy on the front-page of the campaign website. It may not be inappropriate to claim that those elements can be taken into academic consideration as new components of social capital.

6-3. the Internet, Social Capital and the Political Process

The results of the analyses demonstrate that some Internet users are productive in the creation of social capital and others are not. Those Internet users who are productive in the creation of social capital are active in the practice of online political opportunities and positive about prospective changes such opportunities make in political process. This line of explanation may describe synergic effects among the three variables: the Internet, social capital and the political process.

I described the three approaches to political process in Chapter II: political campaign or citizen control over government from the view of plebiscitary approach; community-building from the view of communitarians; and interest aggregation or diversified issue groups from the view of pluralists. As a kind of catalyst for inducing cooperation and tolerance, social capital matters in each approach.

Firstly, the case of the successful campaign by civil movement groups in 2000 in Korea, supported by the Internet, against corrupt or unqualified parliamentary candidates, is a clear example depicting the role of social capital in the political process from the perspective of plebiscitary democracy. In a political campaign, the Internet enables people to be easily informed about political platforms and knowledgeable about the political agenda, which hopefully enables voters to choose a candidate whose political orientation is closer to their own views. A group of people who accumulate social capital based on strong interpersonal ties will readily take action to support their preferred candidate. In this case, the

Internet makes political communication more efficient and democratic and social capital induces cooperation and participation based on trust and political efficacy. The perfect competition model (Boix and Fosner 1998) may be useful in explaining these aspects of political process where voters are well informed, prompt to mobilize and eager to punish underperforming elected representatives at the ballot box, while elected political elites will work harder to govern effectively, lest they be removed from office at election-time. As the effective operation of political institutions depends on the ability of citizens to hold elected representatives accountable for the quality of the governance they provide, social capital helps to produce good governance to the extent that it makes citizens 'sophisticated consumers of politics'. My model confirmed that such processes, making people informed and active in collective action, may be enhanced by trust in virtual community, strong interpersonal relationships , and public websites providing rich political information, based on the modes of Internet usage motivated by social needs,

Secondly, communitarian democracy rejects the rule of majority over minority interest. Communitarians are favourable to participation, deliberation, and persuasion in public space (Abramson, Arterton et al. 1988). The Internet facilitates individuals to participate in community, advance their interests, and persuade others into aggregated interests. The case of mistreatment of new-born babies in 2005 in Korea, which was explained in Chapter V, demonstrates that the Internet enables people to build virtual community to address the problems of careless nurses and amplify the previously unheard voices of the minority who had suffered from the problems. The voice of protest reached the

police and the government agency concerned, who arrested two nurses on a charge of abusing infants and established penalties for convicted infant abusers. The community-oriented model for the function of social capital tends to stress common interest in the long term perspective than private and short-term benefit. The case of mistreated new-born babies creates no conflict between private and public interests among the members of the community. However, what if the common interest concerned is contradictory to the private interest of some individuals? The function of social capital may be essential to harmonising diverse interests and reducing conflicts. The rules of the game, such as government policies or regulations, may be of importance in conflict management and consensus building. Social capital may function in helping the members of a community internalise those rules, which helps reduce transaction costs between citizens and governments. The rule compliance model explains the function of social capital as a mechanism by which people can anticipate others' behaviours. By creating more optimistic expectations about the behaviour of their fellow citizens, social capital can significantly relieve the government from the burden of enforcing compliance.

The structural equation model offers evidence that individuals who are motivated by social needs are likely to trust more in virtual community and to utilise actively online political opportunities. The logistic regression analysis shows that a sense of community and contentment with current life also affect the utilisation of political opportunity; with people willing to make active contact with political leaders and to participate in collective action.

Thirdly, the Internet offers many opportunities for the interested to articulate their wants and concerns. Most interests may be aggregated based on strong social ties, but some interests can be put together by weak social ties at least for short periods of time. To pluralists, the modern democratic process operates on the principle of free competition among groups. They place less emphasis upon the rule of the majority. Bruce Bimber's accelerated pluralism (1998) describes rapidly changing issue groups, with less stability and less dependence on private and public institutional structures. The Internet tends to lower the obstacles to grass-roots mobilization and organization and speeds the flow of political discussion. In particular, the Internet presents benefit to those people outside the boundaries of traditional private and public institutions by lowering transaction costs of organizing for collective action.

However, the stake-holders of different interest can sometimes be in conflict to the degree where compromise may not be possible. Boix and Poisner (1998) argue that social capital can foster accommodative practices among otherwise antagonistic elites. This model applies to a special subset of countries and institutional arenas in which problems of good governance are compounded by the fact that citizens are frozen in antagonistic ethnic, religious or class blocks.

The social integration model may be applied to a situation in which citizens are frozen in a zero-sum situation. This case may involve antagonism instead of free competition supported by pluralists. However, there is an issue in common: how to manage the interactions between fragmented interests. The Korea Tripartite Commission was established in 1998 when Korea faced a painful

economic crisis, the purpose being to realise construction of a platform on which labour and management could cooperate. With sufficient social capital accumulated within the commission and the groups concerned, on the one hand, the leaders of each party can cooperate with other leaders to make the system work, on the other hand, they have to make necessary compromises without losing the support of their group members. Boix and Posner argue that these key enabling conditions will depend on the endowment of social capital possessed by the society concerned.

In the democratic political process, social capital encourages the electorate to recruit political elites who are accountable to citizens' demand and conscious of their support; it can help to amplify the voice of the under-represented; and it can also enable stake-holders within zero-sum situations to work together.

6-4. Limitations and Future Agenda

I would admit that my research has some limitations in its width and depth. It may not be necessary to provide the reasons for the limitations other than to state the difficulty of combining academic research with a full-time career. Furthermore, the difficulties attending comparative study and time series data impose limitations in the width of my research, and the number of variables was somewhat problematic for its depth.

In terms of a future research agenda, firstly, it would be more interesting and convincing if comparative analysis were conducted between at least two countries: Korea and Britain, both cases of which may illuminate governmental intervention in the national diffusion of information technologies (Choudrie and Papazafeiropoulou 2006). There may well be significant differences, in particular, affecting social networks and the modes of political participation of Internet users between the two countries. Some literature documents the cases of Korea and United States but to my knowledge no research has been carried out comparing Korea and Britain. I am planning follow-up research, which includes such a comparative analysis.

Secondly, given that the Internet continues to evolve as well to expand, there is a case for time series data collected from the same respondents at different points of time, i.e. a panel study. However, reviewing the annual reports of the Korea Internet & security Service published for the past decade does not show any significant differences in major indicators in which I am interested in relation to the subject of my research. My current guess is that there may not be any significant difference in the variables related to Internet users' social life and political participation. There are of course substantial practical problems with panel studies, particularly with the Internet as it is not easy to trace the same samples for a long period of time. Such a study may well be beyond the capacity of an individual researcher. In an effort to compensate for this limitation, I employed logistic regression analysis using DATA 2001 to confirm the relationships between off-line factors and online factors.

However, it may be feasible to select one or more focused groups from social networking sites, such as Facebook or Cyworld, and trace changes in the strength of ties among the members of the group based on time series data collected at multiple points of time or yearly intervals. Cyworld may be preferred because geographical proximity to the members in Korea would allow me to conduct interviews for qualitative data. Such data may offer more reliable evidence about changes in the stock of social capital as Internet users become involved in online social networking.

Lastly, my research may have some problem with depth, arising from several focal points and the number of variables. With this problem in mind, established theories were consulted to achieve the necessary coherence and penetration with all key parts of the model. As work on the thesis proceeded, the original analytic model was divided into two, creating a 'two-step structural equation model'.

In fact, the research framework presented here can be split into several components for more focused discussion and in-depth understandings. The advantage of the wider picture, however, is that it enables me to grasp the entire path of Internet influence from internal and psychological mechanisms to the sources of social capital and political opportunity engagement. I am, furthermore, determined to fill the gap between what I have done and what I should have done in my research.

As the Internet continues to transform economies and societies around the world, much more work on the Internet and the political process needs to be carried out efficiently and strategically in the years ahead.

Endnote

[1] OECD Policy Brief: “The e-government imperative: main findings.” (2003) "OECD Policy Brief "The e-government imparative: Main findings"."

[2] Margolis and Resnick suggested three types of Internet politics; *politics within the Net*, which encompasses the political life of cyber-communities and other identifiable online groups that regulate their own affairs and settle disputes among themselves; *politics that affects the Net*, which refers to the host of public policy issues and actions taken by governments that arise from the fact that the Internet is both a new form of mass communication and a vehicle for commerce; *political uses of the Net* , which include the activities of ordinary citizens, political activists, organized interests, political parties, and governments to achieve political goals having little or nothing to do with the Internet Margolis, M. and D. Resnick (2000). Politics as usual : the cyberspace "revolution". Thousand Oaks, Sage Publications.

[3] A columnist provided many incidents of this textual abuse or insulting comments: several young TV stars hung themselves in 2007 after being harassed with negative comments; also, a teenage girl who had appeared on a TV show for successful weight loss committed suicide due to bullying remarks; in 2008, anonymous online users left negative comments on a report about a baseball player who has been in a vegetative state for eight years; even a report about child kidnapping drew negative feedback; negative comments like these even froze Korea`s relationship with China, thanks to a few online remarks on China`s Sichuan earthquake that enraged the Chinese people, prompting some of them to temporarily boycott Korean products (Byung-chul Min, Korea Herald, 17 June 2008).

[4] He criticized online anti-government campaigns which call for candlelight vigils to protest against US beef imports and the overall policies of his government. Chosun Daily, 13 May 2008

[5] . The Minister stressed that online defamatory action, dissemination of false information, and menacing calls for businesses not to run adverts in some newspapers have reached a perilous level, and subsequent damage is on a very serious scale, heightening public concern. We need special measures to redress such illicit acts and disorder in cyberspace. Korea Herald, 23 July 2008

[6] State investment on information protection accounted for 4.3 percent of the total IT budget in 2008. The ratio will nearly double to around 9 percent by 2012, the Korea Communications Commission said. The government will develop the nation`s information security market to be worth 20 trillion won by 2019. Some 700 billion won will be spent over the next five years to beef up IT security facilities in the public sector (Korea Herald, 23 July, 2008)

[7] There were 25,000 cases of hacking incidents and 308,000 cases of leaks of personal information in the public and private sector in just the first half of 2008 (Chosun Daily, 13 October, 2008).

[8] Most of the government committees are not citizen-based, but composed of scholars, activists or politicians. Kwon, H. (2005). “critical essay on the administrative reform of Roh Moo Hyun’s government”. Studies on Korean Society and Adminitration. **16** (1): 1-159.

[9] Different strands of democratic theory may differ in their focus: the plebiscitary view focuses on referendums or political polls as ways to control decision-making process by citizens; in opposition to majority rule over minority interest, communitarians focus on a process of creating and maintaining a good life in common; and according to pluralist democracy, the political process is a series of bargaining and cooperation among people who seek their private interest. Abramson, J. B., F. C. Arterton, et al. (1988). The electronic commonwealth : the impact of new media technologies on democratic politics. New York, Basic Books.

[10] Literature review on this issue will be provided in Chapter 2, but my argument is that such division is not necessary as long as we live in densely networked society in which online and offline relations are intertwined to the extent to which it is hard to clarify the boundary of each world.

[11] The theory of the use and gratification seeks to identify motives by which people actively choose media as well as the mode of media usage. Zillman, D. (1985). “The experimental explorations of gratifications from media entertainment.” Selective exposure to communication. eds. D. Zillman and J. Bryant. Hillside, NJ, Erlbaum.

[12] According to the Internet Statistics Information System (http://isis.nis.or.kr), the Internet penetration rate of the Korean population is 76.5% at the end of 2008, while those of UK and US are 76.24% and 74% respectively.

[13] With this perspective, Bourdieu is regarded as a Marxist theorist focusing on class struggle. Huysman, M. and V. Wulf, Eds. (2004). Social Capital and Information Technology. Cambridge, MA
London, UK, The MIT Press.

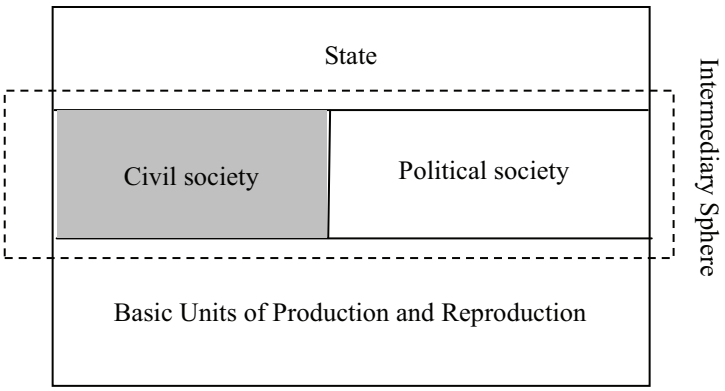
[14] A recent article that appeared in Foreign Affairs argues that the correlations between Putin’s autocracy and economic growth in this decade are mostly “spurious.”McFaul, M. and K. Stoner-Weiss (2008). "The Myth of the Authoritarian Model." Foreign Affairs **87**(1): 68-77.

[15] This can be interpreted in other ways: for example, citizen movement groups, a part of civil society, could substitute for political parties. Hague, R. and S. Y. Uhm (2003). Online groups and offline parties. Political Parties and the Internet: net gain? R. Gibson, P. Nixon and W. Stephen. New York, Routledge**:** 195-217.

[16] This part of the description is based on Pippa Norris’s article.Norris, P. (2000). Making Democracies Work: Social Capital and Civic Engagement in 47 Societies. European Science Foundation EURESCO, the University of Exeter.

[17] Kim provides multi-dimensional definitions of civil society: in terms of organization, civil society refers to the self-organization of society, the constituent parts of which voluntarily engage in public activity; at the relational dimension, it is outside the state in an increasingly independent social sphere, engaged primarily in a complex of non-

state activities, and it is not regulated, dominated, or controlled by the ruling regime; and, at the normative dimension, it engages in collective actions according to a certain set of shared norms and rules. Kim proposes a model of civil society and other societal spheres as the following diagram;



For the detail, see Kim, S. (2000). Democratization in Korea: The Role of Civil Society. Pittsburgh, PA, University of Pittsburgh Press.

[18] One of the critical policy agendas in Korea is to control speculation in real estate. The speculators are keen to pocket all the profits from public development by buying up underdeveloped land. For the detail, see Lee, I.S. (2006). Analysis of Real Estate Policy of the Current Government (*Chamyeo Jeongbu*), Daehan Budongsan hakheoji (Real Estate Policy Review), Real Estate Research Association.

[19] Korea Tripartite Commission was established as a social consultative body in January 1998 for the purpose of overcoming the IMF regime resulting from the economic turmoil in late 1997. The Act on Establishment and Operation of the Korea Tripartite Commission (Legislation No. 5990) was enacted and promulgated in March 1998. In 26th January 2007, the Act on the Korea Tripartite Commission was amended and promulgated with the Act on the Economic and Social Development Commission (http://www.lmg.go.kr)

[20] This argument was presented by Professor Han in an article of Joon-Ahng Daily (27 March, 2000) and, generally speaking, has been shared in learned circles in Korea.

[21] He gave an example: although this group can be viewed as having a public nature, when assessing the aim of the activity by the standards of those within the region, however, when assessed according to the standards of people outside of the region, it is also possible to see it as merely a product of “group egoism.” S.C. Lew. (2001). Social Capital in Korea: The Affective Linkage Group. Korea Journal: 41(3).

[22] These data sets may be ideal to demonstrate dramatic changes in citizens’ trust in some key social and political institutions, such as citizen movement groups and the media.

[23] Initially a public-private partnership involving Bell Telephone, Virginia Tech’s outreach program, and the Blacksburg Town Council, by 1998 the telecommunication infrastructure had been privatized, though the provision of information in the network

continues to emerge from a mixture of public and private sources. In 2004, Internet penetration in Blacksburg was extremely high, reaching 70 percent of residents. Over 60 percent use broadband connections (Blacksburg Electronic Village, 2004).

[24] Among 47,176 adult completions worldwide, they use 39,211 North American adult participants in their analysis.

[25] For example, they can work for the same company or the same department with common experience.

[26] For example, they are in different locations, keep different hours, specialize in different disciplines, work for different companies

[27] Most reports published by the National Internet Development Agency of Korea have used such variables, such as years of using the Internet or the number of e-mail exchanged, to compare with other variables of user behaviors. For example, Korea Network Information Centre (2001). A Survey on the Number of Internet Users and Internet Behavior. Seoul, Korea.

[28] The distinction is not shared by all theorists in the use and gratification model. Most prefer to use only the term 'needs' in subsuming both concepts. McLeod, J. M. and L. B. Becker (1981). The Uses and Gratification Approach. Handbook of Political Communication. D. Nimmo and K. Sanders. Beverly Hill, CA, SAGE**:** 67-99.

[29] For reasons of reliability, I used their questionnaires asking people's motives for Internet use at the stage of establishing exogenous variables.

[30] The "asynchronous" function can be defined as a type of two-way communication that occurs with a time delay, allowing participants to respond at their own convenience, and literally something that is not synchronous, in other words, not at the same time. Example of an application of asynchronous communication is electronic bulletin board. www.tamu.edu/ode/glossary.html

[31] Being "interactive" can be defined as "providing output based on input from the user. This output feeds back into the user's decision process for subsequent interaction. Interactive websites, for instance, allow for more dynamic information browsing and applications such as shopping, banking, etc.
cyber.law.harvard.edu/readinessguide/glossary.html
It also refers to programs or applications that respond directly to the user, taking instructions and giving feedback.
www.uark.edu/mckinsey/glossary.html

[32] (a) vote maximisation and electoral campaigning, (b) pursuit of executive office, (c) policy advocacy, (d) pursuing internal democracy, and socialising and linking citizens into the broader political system. Gibson, R. and W. Stephen (2000). "A Proposed Methodology for Studying the Function and Effectiveness of Party and Candidate Web Sites." Social Science Computer Review **18**(3): 301-319.

[33] The cognitive area refers to both factual and procedural knowledge needed to participate effectively in the political process. Factual knowledge ranges from general information about the working of liberal democratic societies, such as electoral process,

to knowledge about legislation and to research based knowledge about a particular policy issue. Procedural knowledge refers to the specific understanding of the “rules of the game” of the process, which may be a less open and transparent type of knowledge, such as knowledge about lobbying or campaign organising. Schugurensky, D. (2000). Citizen Learning and Democratic Engagement: Political Capital Revisited. Adult Education Research Conference. Plumb, Donovan, Mount Seint Vincent Unversity, Canada.

[34] Knowledge about the political process is not enough to influence a political decision, if it is not complemented with a variety of skills. There are a variety of instrumental skills needed to participate in political processes, such as the ability to speak in public, to argue, to persuade, to deliberate, to negotiate, to forge alliances, to build support for a cause, to organize a collective process, etc. Most of these skills are learned in action, and improved with regular practice. Schugurensky, D. (2000). Citizen Learning and Democratic Engagement: Political Capital Revisited. Adult Education Research Conference. Plumb, Donovan, Mount Seint Vincent University, Canada.

[35] This term refers to the distance between the citizen and the centres of political power. An important element in reducing the citizen’s distance from power is knowing professional politicians and elected representatives, and developing a relationship with them. The concept can be understood as a "conversion" of Bourdieu’s concept of "social capital" to the specificity of politics.

[36] See, Berry, J., K. Portney, et al. (1993). The Rebirth of Urban Democracy. Washington D.C., The Brookings Institute.

[37] A sense of community has four dimensions: feelings of membership, feelings of influence, integration and fulfillment of needs, and shared emotional connection. Blanchard, A. and T. Horan (1998). "Virtual Communities and Social Capital." Social Science Review **16**(3): 293-307.

[38] I haven’t carried out a formal case study for this research but examined briefly some cases, such as DC INSIDE (www.dcinside.co.kr) or I LOVE SCHOOL (www.iloveschool.co.kr). Data accessed 4 July, 2003.

[39] I will provide the detailed story in the next chapter.

[40] http//www.cpb.or.kr. Data accessed 5 July, 2003.

[41] I would like to use the term ‘engagement’ in political opportunities to incorporate both the *utilisation* of the opportunities and the *evaluation* of their value. In particular, the latter will be sometimes substituted by ‘efficacy’ of political opportunities.

[42] it may be an ideal model if all the variables have significant correlations with other variables. In the structural equation model, however, goodness-in-fit of the model will justify the model.

[43] In fact, this kind of model may need more sophisticated data collection method like personal interviews to collect qualitative data or time-series survey to catch changes in individual’s psychological response. However, given the limited time and financial resource, I decided to use the 7-point scaling following many psychometricians who

advocate using seven or nine scale levels. Carifio (2007) has pointed out that Likert scales may be subject to distortion from several causes. Respondents may avoid using extreme response categories (*central tendency bias*); agree with statements as presented (*acquiescence bias*); or try to portray themselves or their organization in a more favorable light (*social desirability bias*). At the time the survey instruments were developed, however, Likert scaling was the most practicable technique known to me in order to produce variables with scalable responses suitable for SEM.

[44] Cronbach alpha is a measure of reliability or internal consistency of a set of Likert scaled survey question items. It does not have the sampling distribution, and is not a test statistic. In general, the criteria value for relatively high internal consistency is above 0.7.

[45] The two data sets were not drawn from the same samples.

[46] In general, the scope of Internet study involves studying all aspects of the Internet. Jones, S. (1999). Doing Internet research : critical issues and methods for examining the Net. Thousand Oaks, Calif., Sage Publications.

[47] Some studies show that e-mail survey do not consistently outperform postal mail: some e-mail surveys did better than postal mail in terms of response rate, some did worse, and some were statistically a dead heat Bachmann, D., J. Elfrink, et al. (1999). "E-mail and snail mail face off in rematch." Marketing Research **11**(4): 11-15.

[48] For the second survey of my research, INR, an online survey professional company, applied a method for filtering out casual responses but checking the length of time a respondent took between opening the questionnaire document and submitting it, and abandoning those responses completed too quickly.

[49] The survey was conducted from April 5, 1999, to May 9, 1999, during evening and weekend hours. Qualified respondents were at least 18 years old and had access to and used the Internet. An incentive of $10 was offered to all participants.

[50] It has not been valid since I outsourced data collection to INR.

[51] Thanks to the financial support from the Department of Politics, the University of Newcastle upon Tyne, I could put this innovative plan into action.

[52] According to INR, the reversed proportion was caused by the fact that the response rate of female samples was higher than that of male samples, despite INR's appropriate sampling from their pool, which was proportional to the gender distribution of the national Internet population.

[53] In fact, there is no gender difference in both data sets, except for utilisation and efficacy of political opportunity, which indicates that male are more active in the utilisation, more positive in the efficacy, of political opportunity, compared to women.

[54] 'I love school'(www.iloveschool.co.kr) provides Internet users with meeting sites for those people who want to find their old school friends and manage restored relations with them.

[55] The result of the structural equation modelling confirms that the variable of social needs is strongly associated with the variable of utilisation. I assume that the middle income groups may have an intervening role in this causal relationship.

[56] Professor Kim taught me about structural equation modelling at the education centre of SPSS Korea and gave me many pieces of advice on my model afterward.

[57] The use of maximum likelihood (ML) estimation assumes that the following conditions have been met: (a) the sample is very large, (b) the distribution of the observed variables is multivariate normal, (c) the hypothesized model is valid, and (d) the scale of observed variables is continuous. Byrne, B. M. (2001). Structual Euation Modeling with AMOS: Basic Concepts, Applications, and Programming. New Jersey, Lawrence Erlbaum Associates.

[58] As the second most frequently visited site, the number of cases for public site, social site, living site and entertainment site is 20(1.7%), 345(30.1%), 578(50.3%) and 205(17.8%) respectively. As the third most frequently visited site. the number of cases for public site, social site, living site and entertainment site is 27(2.3%), 299(26.0%), 583(50.7%) and 241(21.0%) respectively. Data 2001.

[59] In 1998, the National Association of Secretaries of State (NASS) commissioned The Tarrance Group and Lake, Snell, Perry & Associates to conduct bipartisan research to reexamine the profile of our youngest citizens. The purpose of the New Millennium Project was to better understand the problem of declining youth engagement in the political process and to gain insights into potential solutions to this growing problem. The research included both quantitative and qualitative components -- a telephone survey and six focus groups. The national telephone survey was conducted among 1,005 youth, ages 15 to 24. The focus groups consisted of six groups of 18 to 24-year-olds, divided by education levels and voting history. The findings were released to the public in the New Millenium Project Part I: American Youth Attitudes on Politics, Citizenship, Government and Voting. NASS (1999). New Millenium Project --Phase I: A Nationwide Study of 15-24 Year Old Year Old Youth. D. Washington D. http://www.nass.org/Surveys. Data accessed 4 May 2002.

[60] By default SPSS uses Kaier's criterion of retaining factors with eigenvalues greater than 1. Field, A. (2001). Discovering Statistics: using SPSS for Windows. London, SAGE.

[61] The values are standardised regression weights.

[62] Created in 2004, by 2007 Facebook was reported to have more than 21 million registered members generating 1.6 billion page views each day. The site is tightly integrated into the daily media practices of its users: The typical user spends about 20 minutes a day on the site, and two-thirds of users log in at least once a day Ellison, N. B., C. Steinfield, et al. (2007). "The Benefits of Facebook 'friend:' Social capital and college students' use of online social network sites." Journal of Commputer-Mediated Communication **12**(4).

[63] MySpace is a leading social network service, the headquarters of which are in Beverly Hills, California, US, where it shares an office building with its immediate owner, Fox Interactive Media, owned by News Corporation. MySpace became the

most popular social networking site in the United States in June 2006. It was overtaken internationally by its main competitor, Facebook, in April 2008 (Wikipedia.org).

[64] *Cyworld* was launched in 1999 and reconfigured as a full-scale SNS in 2001, pre-dating many of the leading U.S.-based SNSs, including MySpace and Facebook. Although the absolute size of *Cyworld* membership (approximately 20 million users as of 2007) is much smaller than that of MySpace, the social impact of *Cyworld* among South Korean users is considered to be greater than the social impact of MySpace among American users, because *Cyworld* serves nearly 50% of the South Korean population and nearly 90% of those ages 24- 29 Kim, K.-H. and H. Yun (2007). "Cying for me, Cying for Us: Relational Dialectics in a Korean Socila Network Site." Journal of Computer Mediated Communication **13**(1).

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[65] This does not mean that social capital as classical social capital theorists conceptualise is automatically related to political participation. Rather, as stated earlier, I adopted a modified concept of social capital including the relationship between citizens and government, which requires citizens' active engagement in political processes. Maloney, W., G. Smith, et al. (2000). "Social Capital and Urban Governance: Adding a More Contextualized 'Top-down' Perspective." Political Studies **48**: 802-820.

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[66] The path coefficients in SEM were tested by t-test and the critical value for 5% significance level was above ±2. The estimated path coefficient was supposed to be interpreted and applied as standardized beta coefficient in linear regression model.

[67] Such social factors may become ineffective if a person is ideologically or psychologically predisposed to be active or inactive in collective actions. McAdam, D. and R. Poulsen (1993). "Specifying the Relationship Between Social Ties and Activism." American Journal of Sociology **99**(3): 640-667.

[68] The path coefficients in SEM were tested by t-test and the critical value for 5% significance level was above ±2. The estimated path coefficient was supposed to be interpreted and applied as standardized beta coefficient in linear regression model.

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APPENDIX I
Output of Confirmatory Factor Analysis

Sample size = 742

Computation of degrees of freedom

Number of distinct sample moments = 630

Number of distinct parameters to be estimated = 98

Degrees of freedom = 630 - 98 = 532

Minimum was achieved

Chi-square = 2454.192

Degrees of freedom = 532

Probability level = 0.000

Fit Measures

Fit Measure	Default model	Saturated	Independence	Macro
Discrepancy	2454.192	0.000	11599.899	CMIN
Degrees of freedom	532	0	595	DF
P	0.000	0.000	P	
Number of parameters	98	630	35	NPAR
Discrepancy / df	4.613	19.496		CMINDF
RMR	0.127	0.000	0.413	RMR
GFI	0.822	1.000	0.321	GFI
Adjusted GFI	0.790		0.281	AGFI
Parsimony-adjusted GFI	0.694		0.303	PGFI
Normed fit index	0.788	1.000	0.000	NFI
Relative fit index	0.763	0.000	RFI	
Incremental fit index	0.826	1.000	0.000	IFI
Tucker-Lewis index	0.805	0.000	TLI	
Comparative fit index	0.825	1.000	0.000	CFI
Parsimony ratio	0.894	0.000	1.000	PRATIO

Parsimony-adjusted NFI	0.705		0.000		0.000	PNFI
Parsimony-adjusted CFI	0.738		0.000		0.000	PCFI
Non-centrality parameter estimate	1922.192		0.000		11004.899	NCP
NCP lower bound	1771.996		0.000		10658.364	NCPLO
NCP upper bound	2079.864		0.000		11357.823	NCPHI
FMIN	3.312		0.000	1	5.654	FMIN
F0	2.594		0.000		14.851	F0
F0 lower bound	2.391	0.000	14.384		F0LO	
F0 upper bound	2.807	0.000	15.328		F0HI	
RMSEA	0.070		0.158		RMSEA	
RMSEA lower bound	0.067		0.155		RMSEALO	
RMSEA upper bound	0.073		0.161		RMSEAHI	
P for test of close fit	0.000		0.000		PCLOSE	

Regression Weights

			Estimate	S.E.	C.R.	P	Label
D2	<--	EMOTION	0.657	0.056	11.790	0.000	
D13	<--	EMOTION	1.000				
A23	<--	WEAK	0.893	0.052	17.295	0.000	
A26	<--	WEAK	1.010	0.045	22.557	0.000	
A27	<--	WEAK	1.000				
D1	<--	INFORM	0.995	0.051	19.656	0.000	
D4	<--	INFORM	1.000	0.052	19.337	0.000	
D7	<--	INFORM	0.999	0.053	19.022	0.000	
D11	<--	INFORM	1.000				
D3	<--	SOCIAL	1.154	0.080	14.495	0.000	
D5	<--	SOCIAL	1.012	0.076	13.363	0.000	
D6	<--	SOCIAL	1.090	0.084	13.036	0.000	
D8	<--	SOCIAL	1.000				
C23	<--	TRUST	1.048	0.078	13.497	0.000	
C24	<--	TRUST	0.514	0.061	8.483	0.000	
C25	<--	TRUST	1.000				
B1	<--	PRACTICE	0.653	0.050	13.091	0.000	

B3	<--	PRACTICE	0.929	0.060	15.614	0.000
B5	<--	PRACTICE	0.792	0.053	14.936	0.000
B7	<--	PRACTICE	1.000			
B8	<--	EVALUATION	1.000			
B6	<--	EVALUATION	0.915	0.048	19.116	0.000
B4	<--	EVALUATION	1.017	0.054	18.967	0.000
B2	<--	EVALUATION	0.885	0.045	19.624	0.000
D14	<--	SOCIAL	1.367	0.092	14.810	0.000
D12	<--	SOCIAL	0.928	0.082	11.312	0.000
D10	<--	SOCIAL	1.264	0.085	14.814	0.000
A21	<--	STRONG	0.846	0.048	17.570	0.000
A22	<--	STRONG	0.969	0.052	18.568	0.000
A24	<--	STRONG	0.871	0.054	16.141	0.000
C22	<--	TRUST	1.186	0.075	15.798	0.000
C26	<--	TRUST	0.646	0.071	9.129	0.000
A25	<--	STRONG	1.000			
D9	<--	SOCIAL	0.952	0.087	10.982	0.000
C21	<--	TRUST 0.986	0.063	15.690	0.000	

Standardized Regression Weights

			Estimate
D2	<--	EMOTION	0.552
D13	<--	EMOTION	0.934
A23	<--	WEAK	0.638
A26	<--	WEAK	0.819
A27	<--	WEAK	0.814
D1	<--	INFORM	0.759
D4	<--	INFORM	0.746
D7	<--	INFORM	0.734
D11	<--	INFORM	0.751
D3	<--	SOCIAL	0.732
D5	<--	SOCIAL	0.643
D6	<--	SOCIAL	0.619
D8	<--	SOCIAL	0.564
C23	<--	TRUST	0.603

C24	<--	TRUST	0.357
C25	<--	TRUST	0.654
B1	<--	PRACTICE	0.556
B3	<--	PRACTICE	0.684
B5	<--	PRACTICE	0.646
B7	<--	PRACTICE	0.746
B8	<--	EVALUATION	0.764
B6	<--	EVALUATION	0.742
B4	<--	EVALUATION	0.736
B2	<--	EVALUATION	0.763
D14	<--	SOCIAL	0.760
D12	<--	SOCIAL	0.509
D10	<--	SOCIAL	0.760
A21	<--	STRONG	0.692
A22	<--	STRONG	0.734
A24	<--	STRONG	0.636
C22	<--	TRUST	0.749
C26	<--	TRUST	0.386
A25	<--	STRONG	0.758
D9	<--	SOCIAL	0.489
C21	<--	TRUST	0.740

Covariance

		Estimate	S.E.	C.R.	P	Label
INFORM	<-->	STRONG	0.275	0.043	6.399	0.000
SOCIAL	<-->	STRONG	0.415	0.046	9.025	0.000
WEAK	<-->	SOCIAL	0.498	0.051	9.853	0.000
EMOTION	<-->	PRACTICE	-0.039	0.056	-0.696	0.487
WEAK	<-->	PRACTICE	0.407	0.063	6.473	0.000
SOCIAL	<-->	PRACTICE	0.344	0.047	7.351	0.000
WEAK	<-->	EVALUATION	0.409	0.056	7.259	0.000
EVALUATION	<-->	STRONG	0.267	0.052	5.153	0.000
PRACTICE	<-->	STRONG	0.460	0.062	7.409	0.000
WEAK	<-->	STRONG	0.900	0.070	12.772	0.000
SOCIAL	<-->	EVALUATION	0.239	0.039	6.167	0.000

INFORM	<-->	TRUST -0.001	0.029	-0.023	0.981	
TRUST	<-->	PRACTICE	0.288	0.045	6.331	0.000
WEAK	<-->	TRUST 0.345	0.044	7.876	0.000	
TRUST	<-->	EVALUATION	0.184	0.038	4.800	0.000
TRUST	<-->	STRONG	0.321	0.042	7.644	0.000
EMOTION	<-->	EVALUATION	0.283	0.051	5.513	0.000
EMOTION	<-->	WEAK 0.317	0.054	5.914	0.000	
EMOTION	<-->	INFORM	0.659	0.051	12.866	0.000
INFORM	<-->	SOCIAL	0.281	0.035	8.063	0.000
WEAK	<-->	INFORM	0.360	0.046	7.785	0.000
INFORM	<-->	PRACTICE	0.047	0.046	1.039	0.299
INFORM	<-->	EVALUATION	0.402	0.046	8.673	0.000
PRACTICE	<-->	EVALUATION	0.584	0.066	8.892	0.000
SOCIAL	<-->	TRUST 0.228	0.031	7.287	0.000	
EMOTION	<-->	SOCIAL	0.337	0.041	8.190	0.000
EMOTION	<-->	TRUST 0.003	0.036	0.090	0.928	
EMOTION	<-->	STRONG	0.255	0.051	5.024	0.000

Correlations

			Estimate
INFORM	<-->	STRONG	0.308
SOCIAL	<-->	STRONG	0.530
WEAK	<-->	SOCIAL	0.600
EMOTION	<-->	PRACTICE	-0.031
WEAK	<-->	PRACTICE	0.320
SOCIAL	<-->	PRACTICE	0.396
WEAK	<-->	EVALUATION	0.348
EVALUATION	<-->	STRONG	0.241
PRACTICE	<-->	STRONG	0.383
WEAK	<-->	STRONG	0.784
SOCIAL	<-->	EVALUATION	0.299
INFORM	<-->	TRUST	-0.001
TRUST	<-->	PRACTICE	0.326
WEAK	<-->	TRUST	0.408
TRUST	<-->	EVALUATION	0.226

TRUST	<-->	STRONG	0.402
EMOTION	<-->	EVALUATION	0.245
EMOTION	<-->	WEAK	0.264
EMOTION	<-->	INFORM	0.706
INFORM	<-->	SOCIAL	0.434
WEAK	<-->	INFORM	0.380
INFORM	<-->	PRACTICE	0.048
INFORM	<-->	EVALUATION	0.439
PRACTICE	<-->	EVALUATION	0.475
SOCIAL	<-->	TRUST	0.396
EMOTION	<-->	SOCIAL	0.413
EMOTION	<-->	TRUST	0.004
EMOTION	<-->	STRONG	0.226

APPENDIX II
Output of Path Analysis

Sample size = 742

Computation of degrees of freedom

Number of distinct sample moments = 55
Number of distinct parameters to be estimated = 49
Degrees of freedom = 55 - 49 = 6

Minimum was achieved

Chi-square = 5.842
Degrees of freedom = 6
Probability level = 0.441

Fit Measures

Fit Measure	Default model	Saturated	Independence	Macro
Discrepancy	5.842	0.000	1592.789	CMIN
Degrees of freedom	6	0	45	DF
P	0.441	0.000		P
Number of parameters	49	55	10	NPAR
Discrepancy / df	0.974	35.395		CMINDF
RMR	0.418	0.000	9.456	RMR
GFI	0.998	1.000	0.637	GFI
Adjusted GFI	0.986	0.557		AGFI
Parsimony-adjusted GFI	0.109	0.522		PGFI
Normed fit index	0.996	1.000	0.000	NFI
Relative fit index	0.972	0.000		RFI

Incremental fit index	1.000	1.000	0.000	IFI
Tucker-Lewis index	1.001	0.000		TLI
Comparative fit index	1.000	1.000	0.000	CFI
Parsimony ratio	0.133	0.000	1.000	PRATIO
Parsimony-adjusted NFI	0.133	0.000	0.000	PNFI
Parsimony-adjusted CFI	0.133	0.000	0.000	PCFI
Noncentrality parameter				
estimate	0.000	0.000	1547.789	NCP
NCP lower bound	0.000	0.000	1421.075	NCPLO
NCP upper bound	9.837	0.000	1681.881	NCPHI
FMIN	0.008	0.000	2.150	FMIN
F0	0.000	0.000	2.089	F0
F0 lower bound	0.000	0.000	1.918	F0LO
F0 upper bound	0.013	0.000	2.270	F0HI
RMSEA	0.000	0.215		RMSEA
RMSEA lower bound	0.000	0.206		RMSEALO
RMSEA upper bound	0.047	0.225		RMSEAHI
P for test of close fit	0.965	0.000		PCLOSE

Regression Weights

		Estimate	S.E.	C.R.	P	Label
ENTERTAI	<--	EMOTION	4.478	2.369	1.890	0.059
ENTERTAI	<--	SOCIAL	-1.176	2.549	-0.461	0.645
STRONG	<--	EMOTION	0.000	0.040	-0.008	0.994
STRONG	<--	SOCIAL	0.424	0.044	9.732	0.000
WEAK	<--	EMOTION	-0.019	0.043	-0.440	0.660
WEAK	<--	SOCIAL	0.561	0.046	12.201	0.000
TRUST	<--	INFORM	-0.052	0.036	-1.462	0.144
TRUST	<--	EMOTION	-0.024	0.031	-0.791	0.429

TRUST	<--	SOCIAL	0.305	0.033	9.146	0.000
PUBLICWE	<--	INFORM	1.352	0.552	2.448	0.014
PUBLICWE	<--	SOCIAL	0.733	0.518	1.416	0.157
PUBLICWE	<--	EMOTION	-0.741	0.481	-1.540	0.124
ENTERTAI	<--	INFORM	3.157	2.720	1.161	0.246
WEAK	<--	INFORM	0.210	0.049	4.278	0.000
STRONG	<--	INFORM	0.138	0.046	2.974	0.003
TPRACTIC	<--	TRUST	0.119	0.051	2.346	0.019
TEVALUAT	<--	TRUST	0.188	0.051	3.685	0.000
TEVALUAT	<--	WEAK 0.101	0.043	2.352	0.019	
TEVALUAT	<--	PUBLICWE	0.009	0.003	2.977	0.003
TEVALUAT	<--	ENTERTAI	-0.001	0.001	-2.007	0.045
TEVALUAT	<--	SOCIAL	0.060	0.050	1.197	0.231
TEVALUAT	<--	STRONG	-0.013	0.045	-0.292	0.770
TPRACTIC	<--	WEAK	0.008	0.043	0.177	0.859
TPRACTIC	<--	STRONG	0.200	0.045	4.471	0.000
TPRACTIC	<--	PUBLICWE	0.018	0.003	5.734	0.000
TPRACTIC	<--	INFORM	-0.030	0.048	-0.617	0.537
TPRACTIC	<--	ENTERTAI	-0.001	0.001	-0.948	0.343
TEVALUAT	<--	EMOTION	-0.003	0.042	-0.069	0.945
TPRACTIC	<--	EMOTION	-0.156	0.041	-3.783	0.000
TPRACTIC	<--	SOCIAL	0.329	0.050	6.608	0.000
TEVALUAT	<--	INFORM	0.359	0.049	7.378	0.000

Standardized Regression Weights

			Estimate
ENTERTAI	<--	EMOTION	0.083
ENTERTAI	<--	SOCIAL	-0.018
STRONG	<--	EMOTION	0.000
STRONG	<--	SOCIAL	0.356
WEAK	<--	EMOTION	-0.017
WEAK	<--	SOCIAL	0.424
TRUST	<--	INFORM	-0.062
TRUST	<--	EMOTION	-0.033
TRUST	<--	SOCIAL	0.348

PUBLICWE	<--	INFORM	0.108
PUBLICWE	<--	SOCIAL	0.056
PUBLICWE	<--	EMOTION	-0.068
ENTERTAI	<--	INFORM	0.051
WEAK	<--	INFORM	0.165
STRONG	<--	INFORM	0.121
TPRACTIC	<--	TRUST	0.084
TEVALUAT	<--	TRUST	0.134
TEVALUAT	<--	WEAK	0.108
TEVALUAT	<--	PUBLICWE	0.100
TEVALUAT	<--	ENTERTAI	-0.067
TEVALUAT	<--	SOCIAL	0.049
TEVALUAT	<--	STRONG	-0.013
TPRACTIC	<--	WEAK	0.008
TPRACTIC	<--	STRONG	0.193
TPRACTIC	<--	PUBLICWE	0.189
TPRACTIC	<--	INFORM	-0.025
TPRACTIC	<--	ENTERTAI	-0.031
TEVALUAT	<--	EMOTION	-0.003
TPRACTIC	<--	EMOTION	-0.149
TPRACTIC	<--	SOCIAL	0.266
TEVALUAT	<--	INFORM	0.303

Covariance

		Estimate	S.E.	C.R.	P	Label
SOCIAL	<-->	EMOTION	0.329	0.037	8.798	0.000
SOCIAL	<-->	INFORM	0.309	0.033	9.334	0.000
EMOTION	<-->	INFORM	0.535	0.042	12.806	0.000
1.000	<-->	2.000	66.487	24.600	2.703	0.007
4.000	<-->	5.000	0.186	0.029	6.367	0.000
3.000	<-->	5.000	0.173	0.028	6.250	0.000
3.000	<-->	4.000	0.550	0.042	13.009	0.000
6.000	<-->	7.000	0.355	0.039	9.147	0.000

Correlations

		Estimate	
SOCIAL	<-->	EMOTION	0.342
SOCIAL	<-->	INFORM	0.365
EMOTION	<-->	INFORM	0.533
1.000	<-->	2.000	0.100
4.000	<-->	5.000	0.241
3.000	<-->	5.000	0.236
3.000	<-->	4.000	0.544
6.000	<-->	7.000	0.357

APPENDIX 3

Logistic Regression Analyses
On the Relationships between Offline Factors and Online Political Engagement

Model 1: Logistic Regression Analysis of the Relationship between Offline Political Capital and Online Political Opportunity Engagement

- Independent Variable: offline political capital

- Dependant Variables:
  - Model 1-1: utilisation of online contact with politicians
  - Model 1-2: utilisation of online access to political information
  - Model 1-3: utilisation of online delivery of government service
  - Model 1-4: utilisation of online mobilisation of collective action
  - Model 1-5: efficacy of online contact with politicians
  - Model 1-6: efficacy of online access to political information
  - Model 1-7: efficacy of online delivery of government service
  - Model 1-8: efficacy of online mobilisation of collective action

Model 1-1: The Influence of Offline Political Capital on the utilisation of Online Contact with Politicians

N=1150

	B	S.E.	Wald	Sig.
Political Interest	.162	.112	2.079	.149
Political Trust	-.290	.138	4.426	.035
Political Efficacy	-.802	.148	29.377	.000
Constant	5.250	.854	37.791	.000

Model 1-1-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
746.408	.052	.102

Model 1-1-2: Partial Correlation Matrix

	Constant	Political Interest	Political Trust	Political Efficacy
Constant	1.000	-.650	-.527	-.811
Political Interest	-.650	1.000	.016	.490
Political Trust	-.527	.016	1.000	.042
Political Efficacy	-.811	.490	.042	1.000

Model 1-2: The influence of offline political capital on the utilisation of online access to political information

N=1150

	B	S.E.	Wald	Sig.
Political interest	.252	.080	9.868	.002
Political trust	-.253	.100	6.419	.011
Political efficacy	-.579	.103	31.884	.000
Constant	2.890	.589	24.106	.000

Model 1-2-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1283.694	.075	.107

Model 2-2-2: Partial Correlation Matrix

	Constant	Political interest	Political trust	Political efficacy
Constant	1.000	-.657	-.546	-.785
Political interest	-.657	1.000	.022	.466
Political trust	-.546	.022	1.000	.043
Political efficacy	-.785	.466	.043	1.000

Model 1-3: The influence of offline political capital on the utilisation of online delivery of government service

N=1150

	B	S.E.	Wald	Sig.
Political interest	.183	.077	5.706	.017
Political trust	-.068	.094	.533	.465
Political efficacy	-.287	.094	9.411	.002
Constant	1.388	.543	6.536	.011

Model 1-3-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1404.491	.027	.038

Model 2-3-2: Partial Correlation Matrix

	Constant	Political interest	Political trust	Political efficacy
Constant	1.000	-.691	-.536	-.770
Political interest	-.691	1.000	.033	.493
Political trust	-.536	.033	1.000	.014
Political efficacy	-.770	.493	.014	1.000

Model 1-4: The influence of offline political capital on the utilisation of online mobilisation of collective action

N=1150

	B	S.E.	Wald	Sig.
Political interest	.318	.085	13.954	.000
Political trust	-.008	.105	.006	.939
Political efficacy	-.361	.106	11.607	.001
Constant	1.542	.608	6.439	.011

Model 1-4-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1186.487	.045	.068

Model 2-4-2: Partial Correlation Matrix

	Constant	Political interest	Political trust	Political efficacy
Constant	1.000	-.678	-.533	-.779
Political interest	-.678	1.000	.033	.487
Political trust	-.533	.033	1.000	.013
Political efficacy	-.779	.487	.013	1.000

Model 1-5: The influence of offline political capital on the efficacy of online contact with politicians

N-1150

	B	S.E.	Wald	Sig.
Political interest	.228	.080	8.201	.004
Political trust	-.418	.097	18.503	.000
Political efficacy	-.102	.093	1.201	.273
Constant	.062	.545	.013	.910

Model 1-1-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1381.178	.032	.045

Model 2-3-2: Partial Correlation Matrix

	Constant	Political interest	Political trust	Political efficacy
Constant	1.000	-.707	-.528	-.755
Political interest	-.707	1.000	.015	.489
Political trust	-.528	.015	1.000	.011
Political efficacy	-.755	.489	.011	1.000

Model 1-6: The influence of offline political capital on the efficacy of online access to political information

N=1150

	B	S.E.	Wald	Sig.
Political interest	.244	.083	8.620	.003
Political trust	-.154	.098	2.432	.119
Political efficacy	-.301	.096	9.872	.002
Constant	-.300	.562	.286	.593

Model 1-1-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1310.633	.034	.049

Model 2-3-2: Partial Correlation Matrix

	Constant	Political interest	Political trust	Political efficacy
Constant	1.000	-.712	-.534	-.741
Political interest	-.712	1.000	.031	.467
Political trust	-.534	.031	1.000	.010
Political efficacy	-.741	.467	.010	1.000

Model 1-7: The influence of offline political capital on the efficacy of online delivery of government service

N=1150

	B	S.E.	Wald	Sig.
Political interest	.141	.089	2.474	.116
Political trust	-.057	.106	.292	.589
Political efficacy	-.099	.104	.914	.339
Constant	-1.272	.611	4.343	.037

Model 1-1-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1165.843	.006	.009

Model 2-3-2: Partial Correlation Matrix

	Constant	Political interest	Political trust	Political efficacy
Constant	1.000	-.717	-.531	-.748
Political interest	-.717	1.000	.036	.490
Political trust	-.531	.036	1.000	.003
Political efficacy	-.748	.490	.003	1.000

Model 1-8: The influence of offline political capital on the efficacy of online mobilisation of collective action

N=1150

	B	S.E.	Wald	Sig.
Political interest	.231	.080	8.309	.004
Political trust	-.271	.096	7.937	.005
Political efficacy	-.097	.093	1.095	.295
Constant	-.441	.547	.650	.420

Model 1-1-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1370.890	.022	.031

Model 2-3-2: Partial Correlation Matrix

	Constant	Political interest	Political trust	Political efficacy
Constant	1.000	-.711	-.527	-.752
Political interest	-.711	1.000	.022	.487
Political trust	-.527	.022	1.000	.007
Political efficacy	-.752	.487	.007	1.000

Model 2: Logistic Regression Analysis of the Relationship between Online Social Capital and Online Political Opportunity Engagement

- Independent Variable: offline social capital

- Dependant Variables:
  - Model 2-1: utilisation of online contact with politicians
  - Model 2-2: utilisation of online access to political information
  - Model 2-3: utilisation of online delivery of government service
  - Model 2-4: utilisation of online mobilisation of collective action
  - Model 2-5: efficacy of online contact with politicians
  - Model 2-6: efficacy of online access to political information
  - Model 2-7: efficacy of online delivery of government service
  - Model 2-8: efficacy of online mobilisation of collective action

Model 2-1: The influence of offline social capital on the utilisation of online contact with politicians

N-1150

	B	S.E.	Wald	Sig.
Social trust	.488	.195	6.247	.012
Cooperation	-.242	.188	1.658	.198
Community	-.241	.094	6.621	.010
Contentment	-.009	.127	.005	.943
Constant	2.889	.924	9.765	.002

Model 1-1-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
789.241	.016	.031

Model 2-3-2: Partial Correlation Matrix

	Constant	Social trust	Cooperation	Community	Contentment
Constant	1.000	-.457	-.659	-.148	-.402
Social trust	-.457	1.000	.060	.012	.017
Cooperation	-.659	.060	1.000	-.240	-.196
Community	-.148	.012	-.240	1.000	.024
Contentment	-.402	.017	-.196	.024	1.000

Model 2-2: The influence of offline social capital on the utilisation of online access to political information

N=1150

	B	S.E.	Wald	Sig.
Social trust	.065	.130	.248	.619
Cooperation	-.318	.130	5.958	.015
Community	-.121	.066	3.406	.065
Contentment	.132	.089	2.218	.136
Constant	1.907	.640	8.880	.003

Model 1-1-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1359.553	.012	.017

Model 2-3-2: Partial Correlation Matrix

	Constant	Social trust	Cooperation	Community	Contentment
Constant	1.000	-.457	-.663	-.156	-.404
Social trust	-.457	1.000	.059	-.001	.022
Cooperation	-.663	.059	1.000	-.214	-.195
Community	-.156	-.001	-.214	1.000	.028
contentment	-.404	.022	-.195	.028	1.000

Model 2-3: The influence of offline social capital on the utilisation of online delivery of government service

N=1150

	B	S.E.	Wald	Sig.
Social trust	.471	.130	13.084	.000
Cooperation	-.397	.127	9.746	.002
Community	-.064	.063	1.031	.310
Contentment	.062	.086	.520	.471
Constant	1.383	.625	4.896	.027

Model 2-3-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1407.682	.024	.034

Model 2-3-2: Partial Correlation Matrix

	Constant	Social trust	Cooperation	Community	Contentment
Constant	1.000	-.448	-.660	-.155	-.412
Social trust	-.448	1.000	.043	-.002	.024
Cooperation	-.660	.043	1.000	-.214	-.192
Community	-.155	-.002	-.214	1.000	.038
Contentment	-.412	.024	-.192	.038	1.000

Model 2-4: The influence of offline social capital on the utilisation of online mobilisation of collective action

N=1150

	B	S.E.	Wald	Sig.
Social trust	.404	.144	7.869	.005
Cooperation	-.323	.139	5.402	.020
Community	-.026	.070	.140	.708
Contentment	.044	.095	.217	.642
Constant	1.620	.687	5.570	.018

Model 2-4-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1223.826	.013	.020

Model 2-4-2: Partial Correlation Matrix

	Constant	Social trust	cooperation	community	contentment
Constant	1.000	-.454	-.661	-.153	-.412
Social trust	-.454	1.000	.051	.004	.021
Cooperation	-.661	.051	1.000	-.219	-.189
Community	-.153	.004	-.219	1.000	.037
Contentment	-.412	.021	-.189	.037	1.000

Model 2-5: The influence of offline social capital on the efficacy of online contact with politicians

N=1150

	B	S.E.	Wald	Sig.
Social trust	.146	.127	1.320	.251
Cooperation	-.356	.125	8.069	.005
Community	-.132	.065	4.172	.041
Contentment	.200	.088	5.109	.024
Constant	-.101	.613	.027	.869

Model 2-5-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1397.787	.018	.025

Model 2-5-2: Partial Correlation Matrix

	Constant	Social trust	cooperation	community	contentment
Constant	1.000	-.458	-.627	-.159	-.433
Social trust	-.458	1.000	.043	-.019	.032
Cooperation	-.627	.043	1.000	-.220	-.214
Community	-.159	-.019	-.220	1.000	.055
Contentment	-.433	.032	-.214	.055	1.000

Model 2-6: The influence of offline social capital on the efficacy of online access to political information

N=1150

	B	S.E.	Wald	Sig.
Social trust	.167	.131	1.619	.203
Cooperation	-.473	.130	13.276	.000
Community	-.105	.067	2.420	.120
Contentment	.074	.091	.665	.415
Constant	.569	.630	.815	.367

Model 2-6-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1328.619	.019	.027

Model 2-6-2: Partial Correlation Matrix

	Constant	Social trust	Cooperation	Community	Contentment
Constant	1.000	-.453	-.629	-.162	-.432
Social trust	-.453	1.000	.038	-.020	.027
Cooperation	-.629	.038	1.000	-.222	-.208
Community	-.162	-.020	-.222	1.000	.061
Contentment	-.432	.027	-.208	.061	1.000

Model 2-7: The influence of offline social capital on the efficacy of online delivery of government service

N=1150

	B	S.E.	Wald	Sig.
Social trust	.285	.143	3.948	.047
Cooperation	-.422	.141	8.983	.003
Community	-.117	.074	2.470	.116
Contentment	.076	.100	.578	.447
Constant	-.214	.684	.097	.755

Model 2-7-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1153.846	.016	.026

Model 2-7-2: Partial Correlation Matrix

	Constant	Social trust	cooperation	Community	Contentment
Constant	1.000	-.454	-.617	-.160	-.442
Social trust	-.454	1.000	.030	-.028	.029
Cooperation	-.617	.030	1.000	-.227	-.210
Community	-.160	-.028	-.227	1.000	.065
Contentment	-.442	.029	-.210	.065	1.000

Model 2-8: The influence of offline social capital on the efficacy of online mobilisation of collective action

N=1150

	B	S.E.	Wald	Sig.
Social Trust	.120	.129	.861	.353
Cooperation	-.519	.128	16.307	.000
Community	-.033	.066	.257	.612
Contentment	.253	.090	7.836	.005
Constant	.029	.620	.002	.963

Model 2-8-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1372.082	.021	.030

Model 2-8-2: Partial Correlation Matrix

	Constant	Social Trust	Cooperation	Community	Contentment
Constant	1.000	-.459	-.619	-.156	-.430
Social Trust	-.459	1.000	.040	-.013	.033
Cooperation	-.619	.040	1.000	-.234	-.229
Community	-.156	-.013	-.234	1.000	.063
Contentment	-.430	.033	-.229	.063	1.000

Model 3: Logistic Regression Analysis of the Relationship between Media Usage and Online Political Opportunity Engagement

- Independent Variable: (conventional) media usage

- Dependant Variables:
  - Model 3-1: utilisation of online contact with politicians
  - Model 3-2: utilisation of online access to political information
  - Model 3-3: utilisation of online delivery of government service
  - Model 3-4: utilisation of online mobilisation of collective action
  - Model 3-5: efficacy of online contact with politicians
  - Model 3-6: efficacy of online access to political information
  - Model 3-7: efficacy of online delivery of government service
  - Model 3-8: efficacy of online mobilisation of collective action

Model 3-1: The influence of media usage on the utilisation of online contact with politicians

N=1150

	B	S.E.	Wald	Sig.
TV_HOUR	-.075	.035	4.580	.032
TV_NEWS	.083	.142	.343	.558
TV_DRAMA	-.225	.132	2.895	.089
TV_INFO	.020	.133	.023	.880
PAPER_HOUR	.048	.038	1.600	.206
PAPER_OPED	.299	.125	5.667	.017
PAPER_ENT	-.333	.122	7.490	.006
PAPER_CUR	.288	.137	4.441	.035
Constant	1.813	.480	14.272	.000

Model 3-1-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
738.943	.034	.067

Model 3-1-2: Partial Correlation Matrix

	Constant	TV_HOUR	TV_NEWS	TV_DRAMA	TV_INFO	PAPER_HOUR	PAPER_OPED	PAPER_ENT	PAPER_CUR
Constant	1.000	-.349	-.195	-.544	-.244	-.067	-.337	-.158	-.129
TV_HOUR	-.349	1.000	.040	.227	.099	-.225	-.035	.001	-.015
TV_NEWS	-.195	.040	1.000	.042	-.261	.027	-.155	.080	-.251
TV_DRAMA	-.544	.227	.042	1.000	-.193	-.075	.144	-.275	.112
TV_INFO	-.244	.099	-.261	-.193	1.000	-.036	-.035	-.035	-.103
PAPER_HOUR	-.067	-.225	.027	-.075	-.036	1.000	.057	.025	.048
PAPER_OP	-.337	-.035	-.155	.144	-.035	.057	1.000	-.096	-.328

ED									
PAPER_ENT	-.158	.001	.080	-.275	-.035	.025	-.096	1.000	-.223
PAPER_CUR	-.129	-.015	-.251	.112	-.103	.048	-.328	-.223	1.000

Model 3-2: The influence of media usage on the utilisation of online access to political information

	B	S.E.	Wald	Sig.
TV_HOUR	.056	.040	1.997	.158
TV_NEWS	.050	.097	.265	.607
TV_DRAMA	-.088	.095	.849	.357
TV_INFO	-.007	.093	.006	.939
PAPER_HOUR	.002	.017	.020	.888
PAPER_OPED	.405	.088	20.980	.000
PAPER_ENT	-.059	.090	.420	.517
PAPER_CUR	.221	.094	5.532	.019
Constant	-.418	.360	1.347	.246

Model 3-2-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1266.402	.052	.074

Model 3-2-2: Partial Correlation Matrix

	Constant	TV_HOUR	TV_NEWS	TV_DRAMA	TV_INFO	PAPER_HOUR	PAPER_OPED	PAPER_ENT	PAPER_CUR
Constant	1.000	-.459	-.204	-.539	-.228	-.080	-.338	-.164	-.149
TV_HOUR	-.459	1.000	.073	.275	.085	-.046	-.018	.022	-.040
TV_NEWS	-.204	.073	1.000	.063	-.263	.047	-.152	.066	-.245
TV_DRAMA	-.539	.275	.063	1.000	-.199	-.052	.127	-.256	.104
TV_INFO	-.228	.085	-.263	-.199	1.000	-.038	-.041	-.029	-.112
PAPER_HOUR	-.080	-.046	.047	-.052	-.038	1.000	.029	.027	.041
PAPER_OPED	-.338	-.018	-.152	.127	-.041	.029	1.000	-.100	-.285
PAPER_ENT	-.164	.022	.066	-.256	-.029	.027	-.100	1.000	-.188
PAPER_CUR	-.149	-.040	-.245	.104	-.112	.041	-.285	-.188	1.000

Model 3-3: The influence of media usage on the utilisation of online delivery of government service

	B	S.E.	Wald	Sig.
TV_HOUR	.028	.033	.713	.398
TV_NEWS	.076	.092	.681	.409
TV_DRAMA	-.126	.090	1.951	.162
TV_INFO	.071	.089	.625	.429
PAPER_HOUR	-.004	.016	.078	.781
PAPER_OPED	.192	.084	5.277	.022
PAPER_ENT	-.108	.085	1.617	.203
PAPER_CUR	.150	.089	2.871	.090
Constant	.084	.333	.064	.800

Model 3-3-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1359.108	.025	.035

Model 3-3-2: Partial Correlation Matrix

	Constant	TV_HOUR	TV_NEWS	TV_DRAMA	TV_INFO	PAPER_HOUR	PAPER_OPED	PAPER_ENT	PAPER_CUR
Constant	1.000	-.418	-.209	-.539	-.231	-.082	-.343	-.131	-.141
TV_HOUR	-.418	1.000	.060	.249	.089	-.068	-.019	.006	-.032
TV_NEWS	-.209	.060	1.000	.063	-.267	.044	-.146	.069	-.233
TV_DRAMA	-.539	.249	.063	1.000	-.203	-.052	.128	-.260	.115
TV_INFO	-.231	.089	-.267	-.203	1.000	-.043	-.037	-.036	-.109
PAPER_HOUR	-.082	-.068	.044	-.052	-.043	1.000	.029	.035	.049
PAPER_OPED	-.343	-.019	-.146	.128	-.037	.029	1.000	-.118	-.316
PAPER_ENT	-.131	.006	.069	-.260	-.036	.035	-.118	1.000	-.220
PAPER_CUR	-.141	-.032	-.233	.115	-.109	.049	-.316	-.220	1.000

Model 3-4: The influence of media usage on the utilisation of online mobilisation of collective action

N=1150

	B	S.E.	Wald	Sig.
TV_HOUR	-.016	.033	.232	.630
TV_NEWS	-.135	.100	1.813	.178
TV_DRAMA	-.217	.098	4.957	.026
TV_INFO	-.012	.098	.016	.901
PAPER_HOUR	.037	.024	2.334	.127
PAPER_OPED	.216	.093	5.430	.020
PAPER_ENT	.057	.095	.362	.547
PAPER_CUR	.167	.099	2.836	.092
Constant	.938	.363	6.676	.010

Model 3-4-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1176.665	.021	.032

Model 3-4-2: Partial Correlation Matrix

	Constant	TV_HOUR	TV_NEWS	TV_DRAMA	TV_INFO	PAPER_HOUR	PAPER_OPED	PAPER_ENT	PAPER_CUR
Constant	1.000	-.393	-.182	-.523	-.237	-.088	-.347	-.151	-.153
TV_HOUR	-.393	1.000	.059	.235	.096	-.105	-.029	-.003	-.022
TV_NEWS	-.182	.059	1.000	.048	-.272	.034	-.164	.061	-.248
TV_DRAMA	-.523	.235	.048	1.000	-.204	-.055	.131	-.267	.110
TV_INFO	-.237	.096	-.272	-.204	1.000	-.033	-.038	-.029	-.110
PAPER_HOUR	-.088	-.105	.034	-.055	-.033	1.000	.041	.028	.048
PAPER_OPED	-.347	-.029	-.164	.131	-.038	.041	1.000	-.098	-.306
PAPER_ENT	-.151	-.003	.061	-.267	-.029	.028	-.098	1.000	-.193
PAPER_CUR	-.153	-.022	-.248	.110	-.110	.048	-.306	-.193	1.000

Model 3-5: The influence of media usage on the efficacy of online contact with politicians

N=1150

	B	S.E.	Wald	Sig.
TV_HOUR	.037	.029	1.633	.201
TV_NEWS	.172	.090	3.649	.056
TV_DRAMA	.024	.090	.069	.793
TV_INFO	.105	.090	1.348	.246
PAPER_HOUR	-.011	.018	.374	.541
PAPER_OPED	-.061	.085	.502	.479
PAPER_ENT	.023	.084	.074	.786
PAPER_CUR	.197	.088	4.984	.026
Constant	-1.815	.334	29.521	.000

Model 3-5-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1338.141	.018	.026

Model 3-5-2: Partial Correlation Matrix

	Constant	TV_HOUR	TV_NEWS	TV_DRAMA	TV_INFO	PAPER_HOUR	PAPER_OPED	PAPER_ENT	PAPER_CUR
Constant	1.000	-.396	-.206	-.528	-.239	-.088	-.345	-.092	-.155
TV_HOUR	-.396	1.000	.055	.245	.097	-.109	-.026	-.008	-.018
TV_NEWS	-.206	.055	1.000	.054	-.273	.042	-.153	.074	-.213
TV_DRAMA	-.528	.245	.054	1.000	-.209	-.050	.141	-.266	.124
TV_INFO	-.239	.097	-.273	-.209	1.000	-.048	-.042	-.032	-.109
PAPER_HOUR	-.088	-.109	.042	-.050	-.048	1.000	.044	.041	.048
PAPER_OPED	-.345	-.026	-.153	.141	-.042	.044	1.000	-.142	-.333
PAPER_ENT	-.092	-.008	.074	-.266	-.032	.041	-.142	1.000	-.243
PAPER_CUR	-.155	-.018	-.213	.124	-.109	.048	-.333	-.243	1.000

Model 3-6: The influence of media usage on the efficacy of online access to political information

N=1150

	B	S.E.	Wald	Sig.
TV_HOUR	.059	.030	3.975	.046
TV_NEWS	.142	.094	2.298	.130
TV_DRAMA	-.130	.095	1.848	.174
TV_INFO	.062	.095	.426	.514
PAPER_HOUR	-.010	.020	.273	.602
PAPER_OPED	-.054	.090	.365	.546
PAPER_ENT	.173	.087	3.948	.047
PAPER_CUR	.288	.092	9.795	.002
Constant	-2.084	.348	35.860	.000

Model 3-6-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1249.821	.035	.050

Model 3-6-2: Partial Correlation Matrix

	Constant	TV_HOUR	TV_NEWS	TV_DRAMA	TV_INFO	PAPER_HOUR	PAPER_OPED	PAPER_ENT	PAPER_CUR
Constant	1.000	-.393	-.212	-.516	-.238	-.094	-.344	-.084	-.157
TV_HOUR	-.393	1.000	.053	.235	.098	-.113	-.029	-.005	-.011
TV_NEWS	-.212	.053	1.000	.052	-.275	.038	-.149	.081	-.205
TV_DRAMA	-.516	.235	.052	1.000	-.208	-.048	.147	-.278	.115
TV_INFO	-.238	.098	-.275	-.208	1.000	-.046	-.044	-.033	-.108
PAPER_HOUR	-.094	-.113	.038	-.048	-.046	1.000	.053	.045	.044
PAPER_OPED	-.344	-.029	-.149	.147	-.044	.053	1.000	-.155	-.341
PAPER_ENT	-.084	-.005	.081	-.278	-.033	.045	-.155	1.000	-.243
PAPER_CUR	-.157	-.011	-.205	.115	-.108	.044	-.341	-.243	1.000

Model 3-7: The influence of media usage on the efficacy of online delivery of government service

N=1150

	B	S.E.	Wald	Sig.
TV_HOUR	.059	.030	3.975	.046
TV_NEWS	.142	.094	2.298	.130
TV_DRAMA	-.130	.095	1.848	.174
TV_INFO	.062	.095	.426	.514
PAPER_HOUR	-.010	.020	.273	.602
PAPER_OPED	-.054	.090	.365	.546
PAPER_ENT	.173	.087	3.948	.047
PAPER_CUR	.288	.092	9.795	.002
Constant	-2.084	.348	35.860	.000

Model 3-7-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1083.726	.031	.049

Model 3-7-2: Partial Correlation Matrix

	Constant	TV_HOUR	TV_NEWS	TV_DRAMA	TV_INFO	PAPER_HOUR	PAPER_OPED	PAPER_ENT	PAPER_CUR
Constant	1.000	-.393	-.212	-.516	-.238	-.094	-.344	-.084	-.157
TV_HOUR	-.393	1.000	.053	.235	.098	-.113	-.029	-.005	-.011
TV_NEWS	-.212	.053	1.000	.052	-.275	.038	-.149	.081	-.205
TV_DRAMA	-.516	.235	.052	1.000	-.208	-.048	.147	-.278	.115
TV_INFO	-.238	.098	-.275	-.208	1.000	-.046	-.044	-.033	-.108
PAPER_HOUR	-.094	-.113	.038	-.048	-.046	1.000	.053	.045	.044
PAPER_OPED	-.344	-.029	-.149	.147	-.044	.053	1.000	-.155	-.341
PAPER_ENT	-.084	-.005	.081	-.278	-.033	.045	-.155	1.000	-.243
PAPER_CUR	-.157	-.011	-.205	.115	-.108	.044	-.341	-.243	1.000

Model 3-8: The influence of media usage on the efficacy of online mobilisation of collective action

N=1150

	B	S.E.	Wald	Sig.
TV_HOUR	.033	.029	1.261	.261
TV_NEWS	.123	.091	1.854	.173
TV_DRAMA	.079	.091	.764	.382
TV_INFO	.049	.091	.288	.591
PAPER_HOUR	.019	.016	1.513	.219
PAPER_OPED	.086	.085	1.012	.314
PAPER_ENT	.068	.084	.655	.418
PAPER_CUR	.093	.089	1.105	.293
Constant	-2.001	.337	35.190	.000

Model 3-8-1: Goodness of Fit Statistics

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1328.503	.013	.019

Model 3-8-2: Partial Correlation Matrix

	TV_ HOUR	TV_ NEWS	TV_ DRAMA	TV_ INFO	PAPER_ HOUR	PAPER_ OPED	PAPER_ ENT	PAPER_ CUR
Constant	-.396	-.207	-.533	-.232	-.093	-.360	-.094	-.145
TV_HOUR	1.000	.053	.246	.094	-.089	-.017	-.006	-.024
TV_NEWS	.053	1.000	.059	-.275	.051	-.145	.076	-.219
TV_DRAMA	.246	.059	1.000	-.209	-.051	.139	-.265	.128
TV_INFO	.094	-.275	-.209	1.000	-.048	-.038	-.032	-.116
PAPER_HOUR	-.089	.051	-.051	-.048	1.000	.035	.041	.057
PAPER_OPED	-.017	-.145	.139	-.038	.035	1.000	-.138	-.328
PAPER_ENT	-.006	.076	-.265	-.032	.041	-.138	1.000	-.248
PAPER_CUR	-.024	-.219	.128	-.116	.057	-.328	-.248	1.000

APPENDIX 4
Survey Questionnaire 2001

A Survey on Internet Use and Social Capital

Introduction

In Korea, more than half of the total population uses the Internet regularly. Along with political democratization and social diversification, the rapid changes in the IT environment are bringing considerable change to public and personal lives.

Started from the question on "whether the Internet contributes to making the society a better place to live," the research mainly aims to analyze the influence of Internet on people's media usage pattern, social activities, public life, and political attitude.

Designed for academic research purposes, this questionnaire covers a wide range of topics—from personal media usage to political orientation.

Usage of survey results will strictly be limited for academic research purposes.

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1. The following are some media that tells us what goes on around the world. Please select two most often used media then write the number of your most often used medium in the first square, and in the second square, write down the second most frequently used medium.

① Television ② Radio ③ Daily newspaper ④ Magazine ⑤ Internet/on-line service ⑥ Word of mouth		
1-1	**Most used** medium	
1-2	**Second most used** medium	

2. Among the media, select the two most reliable media then write the number of your most reliable medium in the first square and the second most reliable medium in the second square.

① Television ② Radio ③ Daily newspaper ④ Magazine ⑤ Internet/on-line service ⑥ Word of mouth		
2-1	**Most reliable** media	
2-2	**Second most reliable** medium	

3. People use the Internet for a variety of reasons. After reading the various reasons for using the Internet, please choose the statement that best describes your level of agreement.

	"I use the Internet to… " (reasons for using the Internet)	Do not agree at all	Do not agree	Somew hat disagre e	Some what agree	Agree	Fully agree
3-1	To obtain useful information	●	●	●	●	●	●
3-2	To pass the time	●	●	●	●	●	●
3-3	To find someone who shares the same ideas	●	●	●	●	●	●
3-4	To get up-to-date news	●	●	●	●	●	●
3-5	To exchange ideas and information with others	●	●	●	●	●	●
3-6	To persuade others into joining my project	●	●	●	●	●	●
3-7	To learn something new	●	●	●	●	●	●
3-8	To ask others for help	●	●	●	●	●	●
3-9	To escape from my boring life	●	●	●	●	●	●
3-10	To maintain a good relationship with others	●	●	●	●	●	●
3-11	To make life more convenient	●	●	●	●	●	●
3-12	To manage resources in a remote place	●	●	●	●	●	●
3-13	To enjoy something exciting for a moment	●	●	●	●	●	●
3-14	To have conversation with many people	●	●	●	●	●	●

4. How long have you used the Internet?:

( ) years (May use decimal points. For instance write “2.5” for 2 years and 6 months)

5. We would like to know how much time you spend using the Internet. On average, how many hours a week do you spend using the Internet?

About ( ) hours

6. We would like to know how often you receive emails. How may emails do you receive per week or month? (Excluding junk mails and spam mails)

About ( ) (indicate “per week” or” per month”)

7. We would like to know how often you write emails. How may emails do you write per week or month?

About ( ) (indicate “per week” or “per month”)

8. Do you use instant messaging services (e.g. messengers, ICQ, Yahoo Messengers, etc)?

① Yes. ② No

9. Do you use wireless Internet on your mobile phone?

① Yes. ● ② No. ●

10. Do you have high-speed Internet (ISDN, ADSL, etc) at home?

① Yes. ② No.

11. Do you have a personal webpage or a webpage you manage?

① Yes. ② No.

12. Following are various types of websites. Please fill in the squares with the number indicating the websites you use most frequently.

1) Lottery/game	2) Banking/investment	3) Public office/civil service	4) Political parties/politicians
5) Civic groups /NGO	6) Internet message board /internet communities	7) Hobby/clubs	8) News/media
9) Reference	10) Search engines	11) Electronic commerce/online shopping	12) Online music/films
13) Online cartoons	14) Travel/ticketing	15) Online education	16) Chat rooms

12-1	Website used most frequently	
12-2	Second most frequently used website	
12-3	Third most frequently used website	

13. How many hours a day do you spend watching TV?

About ( ) hours

14. Please indicate how often you watch the following types of programs.

		Very often ①	Sometimes ②	Rarely ③	Not at all ④
14-1	News, discussions on current issues	●	●	●	●
14-2	Drama, music/entertainment shows	●	●	●	●
14-3	Weather, lifestyle	●	●	●	●

15. How many hours a day do you spend reading the newspaper?

About ( ) hours

16. Please indicate how often you read the following newspaper sections.

		Very often ①	Sometimes ②	Rarely ③	Not at all ④
16-1	Editorial, current issues	●	●	●	●
16-2	Culture, sports, entertainment	●	●	●	●
16-3	Politics, social news, economy	●	●	●	●

17. Please describe your employer type?
(Please mark “Public sector” if you belong to what is currently referred to as the third sector.)
① Public sector
② Private sector
③ Other (student, unemployed, etc)

18. Have you even been involved in public office, political activities (e.g. election campaigns, demonstrations) or civil movements (e.g. consumer movements, environment campaigns)?
① Yes. ② No.

19. Do you have friends or family members who were involved in public office, political activities (e.g. election campaigns, demonstrations) or civil movements (e.g. consumer movements, environment campaigns)?
① Yes. ② No.

20. If you face difficult problems, to whom do you usually go for help? Select two and put in the number of the person you most often go to in the first square, and the person you go to the second most often in the second square.

1) Family	2) Friend	3) Colleague/boss
4) Neighbor	5) Professional counselor	6) Fortuneteller
7) Online community	8) Religious group	9) No one(myself)

20-1	Person/group most often sought for help
20-2	Second most often sought person/group for help

21. How often do you attend your neighbors' family events?

① Very often
② Often
③ Sometimes
④ Rarely

22. Following statements describe the changes in personal relationships that may occur after using the Internet. For each statement, please choose the statement that best describes your level of agreement.

		Very much agree	Somewhat agree	No change	Somewhat disagree	Do not agree at all	Don't know
22-1	Stay even closer to people close to me	●	●	●	●	●	●
22-2	Can stay close with people I couldn't stay in touch with before	●	●	●	●	●	●
22-3	Get to meet new people more easily	●	●	●	●	●	●
22-4	Can communicate more actively with my family (living together or apart)	●	●	●	●	●	●
22-5	Can participate in clubs, societies, or groups more often	●	●	●	●	●	●
22-6	Have more people that help me	●	●	●	●	●	●
22-7	Can easily meet people who work in other fields	●	●	●	●	●	●
22-8	Can freely control my relationship with other people	●	●	●	●	●	●

23. On the Internet, there are numerous websites where people post their opinions and have discussions (e.g. online communities, online forums, 100-letter comments on online newspapers). Have you ever participated (posted your opinions in writing) in these sites?

① Yes (go to question no.**24**)

② No (go to question no. **27**)

24. If you answered "**Yes**," in question no. 23, what kind of website do you usually participate in? Please select all.

1) Community site
2) Online shopping
3) Central government
4) Local government/public institution
5) Political party/political organization
6) Media/newspaper/broadcasting station
7) Private enterprise
8) Civic group
9) Others

25. In association with the previous question, please select your two most important purposes for participating in online message boards and in the first square, fill in the number that indicates the most important purpose, and write your second most important purpose in the second square.

① Form virtual community	② Express complaint	
③ Bond with like-minded people	④ Mass protest	
⑤ Form public opinion	⑥ Find friends	
⑦ Express opinion	⑧ Ask for help	
⑨ Share information	⑩ Others	
25-1	Most important purpose	
25-2	Second most important purpose	

26. Following statements are various opinions about other people that participate in message boards. Please choose the statement that best describes your level of agreement.

		Do not agree at all	Do not agree	Somewhat disagree	Somewhat agree	Agree	Fully agree
26-1	They are usually credible	●	●	●	●	●	●
26-2	Many of them act irresponsibly by taking advantage of anonymity	●	●	●	●	●	●
26-3	There certainly are people with ulterior motives	●	●	●	●	●	●
26-4	There are many who express opinions that are worth listening to	●	●	●	●	●	●
26-5	More people put emotions before reason	●	●	●	●	●	●
26-6	A few people ruin the atmosphere	●	●	●	●	●	●

27. If you chose "**No**" in question no. 23, what is the reason for not participating in online forums?

① Don't have the time
② Don't see the value in participating
③ People who speak out at online forums are different from me
④ Don't know how to participate/access online message boards
⑤ Don't have anything to say
⑥ Others

Following are the typical changes that have occurred after governments, public institutions, and civic groups have actively adopted the Internet. Please choose "Yes" or "No" to each statement regarding the level of awareness and evaluation towards the changes.

28. "The Internet facilitates individual citizen's direct contact with policy-maker or political leader through e-mail or electronic bulletin board."			
	Question	Yes	No
28-1	Are you aware of the change?	●	●
28-2	Have you ever participated in the activity?	●	●
28-3	Do you think the change will help bring the public and the government closer?	●	●

29. "The Internet tends to make the response of public agencies or services requested by citizen more available and convenient."			
	Question	Yes	No
29-1	Are you aware of the online administrative service?	●	●
29-2	Have you ever used the online administrative service?	●	●
29-3	Do you think the service helps to enhance people's lives?	●	●

30. "The Internet enables people to get a plenty of information about some specific policies or political issues."			
	Question	Yes	No
30-1	Are you aware that you can access such information?	●	●
30-2	Have you ever accessed such information?	●	●
30-3	Do you think the change helps to improve democracy?	●	●

31. “As the Internet makes it easy to communicate with other people who share similar political opinions, it is a very effective way to mobilize for collective actions in order to appeal against specific policies or to request government actions.”

	Question	Yes	No
31-1	Are you aware of such method?	●	●
31-2	Have you ever experienced such method?	●	●
31-3	Do you think the change helps to increase public participation in politics?	●	●

32. Generally speaking, do you consider other people reliable? Or do you think you should exercise caution when dealing with others?

① People are reliable

② I should be careful when dealing with others.

③ Don’t know.

33. Do you think other people are innocent or are they always looking for opportunities to take advantage of you?

① People try to take advantage of me

② People are innocent

③ Don’t know

34. Do you think most people try to help you or are they just interested in taking care of themselves?

① People try to help others

② People just take care of themselves

③ Don’t know

35. The table below lists various government organizations, public institutions, and civic groups. For each institution, please mark the statement that best describes your level of trust.

	Institution	Very reliable	Somewhat reliable	Somewhat unreliable	Not reliable at all
35-1	Educational institutions	●	●	●	●
35-2	Court	●	●	●	●
35-3	Military	●	●	●	●
35-4	Religious groups	●	●	●	●
35-5	Mass media including newspaper, broadcasting station	●	●	●	●
35-6	Medical institutions	●	●	●	●
35-7	Public prosecutors/police	●	●	●	●
35-8	Civil servants	●	●	●	●
35-9	National Assembly/political parties	●	●	●	●
35-10	Conglomerates	●	●	●	●
35-11	Civic groups	●	●	●	●

36. Even someone who is not interested in politics can have impressions or opinions on politicians, political systems, and democracy. The following are some general opinions about politics. Please choose the statement that best describes your level of agreement.

	Statement	Do not agree at all	Do not agree	Somewhat disagree	Somewhat agree	Agree	Fully agree
36-1	In general, Korean political leaders make right decisions	●	●	●	●	●	●
36-2	In general, politicians listen to voters	●	●	●	●	●	●
36-3	In general, I am satisfied with the government's performance	●	●	●	●	●	●
36-4	Korea has achieved a considerable level of democracy	●	●	●	●	●	●
36-5	Corruption of civil servants and politicians are caused by illogical system	●	●	●	●	●	●
36-6	Democracy is inefficient for running a nation	●	●	●	●	●	●
36-7	A stronger political leadership is required for the nation's economic development	●	●	●	●	●	●
36-8	Constitutional reform is required for political reform	●	●	●	●	●	●

37. Following are some thoughts about the Internet. Please choose the statement that best describes your level of agreement.

	Statement	Do not agree at all	Do not agree	Somewhat disagree	Somewhat agree	Agree	Fully agree
37-1	In general, the cyberspace is not that dangerous	●	●	●	●	●	●
37-2	I think I gain more by getting online	●	●	●	●	●	●
37-3	If I am more careful, I will not be troubled by computer virus or spam mail	●	●	●	●	●	●
37-4	Network is bound to have defects that cause damage	●	●	●	●	●	●
37-5	When registering for membership for online services, I hesitate giving my personal details (email address, phone number)	●	●	●	●	●	●
37-6	People using online chat rooms seem to feel responsible in maintaining the community's quality	●	●	●	●	●	●
37-7	I think my online activities are being monitored	●	●	●	●	●	●
37-8	I trust the information on the Internet	●	●	●	●	●	●

38. Recently, opportunities to participate in various community service programs, national events, and disaster relief activities are increasing. Please enter the number of hours you have spent participating in voluntary activities during the past 1 year. If you have not participated at all, please write “0”.

About ( ) hours

39. Apart from your workplace, you may participate in meetings or groups. Please mark all the groups/activities you participate in.

1) Don’t participate in any group	2) Community service group
3) Religious group	4) Political organization/party
5) Environment protection organization	6) Consumer protection organization
7) Human rights group	8) Hobbyist groups
9) Professional organization	10) Social gathering (e.g.alumni)

40. How often do you or your family attend the neighborhood meeting?

① Every time ② Sometimes ③ Rarely ④ Not at all

41. Following are some personal attitudes toward political issues. Please choose the statement that best describes your level of agreement.

	Statement	Do not agree at all	Do not agree	Somewhat disagree	Somewhat agree	Agree	Fully agree
41-1	In general, I have a good grasp of current political issues	●	●	●	●	●	●
41-2	I can influence government policies	●	●	●	●	●	●
41-3	I can confidently have discussions on political issues	●	●	●	●	●	●
41-4	There is no systematic device that reflect public opinion in policy-making process	●	●	●	●	●	●

42. Following are some statements regarding other members of your group. Please choose the statement that best describes your level of agreement.

	Statement	Do not agree at all	Do not agree	Somewhat disagree	Somewhat agree	Agree	Fully agree
42-1	It is important to be in harmony with the group(job, neighborhood, organization) I belong to	●	●	●	●	●	●
42-2	I do not give up my ideas even if they differ from those of my colleagues	●	●	●	●	●	●
42-3	I often sacrifice my interests for the sake of my group	●	●	●	●	●	●
42-4	I can be in good terms with people from rivaling organizations/regions	●	●	●	●	●	●
42-5	My colleagues at work try to help me	●	●	●	●	●	●
42-6	I think our society is ready to accept socialist ideas	●	●	●	●	●	●

43. Following are some statements regarding neighborhoods and neighbors. Please choose the statement that best describes your level of agreement.

	Statements	Do not agree at all	Do not agree	Somewhat disagree	Somewhat agree	Agree	Fully agree
43-1	I know most of my neighbors	●	●	●	●	●	●
43-2	My neighborhood is very important to my everyday life	●	●	●	●	●	●
43-3	I have a sense of belonging to my neighborhood	●	●	●	●	●	●
43-4	I have a strong affection towards my neighborhood	●	●	●	●	●	●
43-5	My neighbors always try to be helpful	●	●	●	●	●	●

44. Following are some statements regarding **personal life**. Please choose the statement that best describes your level of agreement.

	Statement	Do not agree at all	Do not agree	Somewhat disagree	Somewhat agree	Agree	Fully agree
44-1	I am content with my life these days	●	●	●	●	●	●
44-2	I want to leave reality and lead a totally different life	●	●	●	●	●	●
44-3	In next life, I want to have a completely different profession	●	●	●	●	●	●
44-4	Sometimes, I think my life is totally about of control	●	●	●	●	●	●

45. How interested are you in politics?

① Very interested. ② Somewhat interested. ③ Little bit interested. ④ Not interested.

46. In the recent 3 years, have you written to civil servants, politicians, or any members of the National Assembly to express your complaint, to support, or to make policy suggestions?

① Yes. ② No.

47. Have you donated to politicians or political parties in the recent 3 years?

① Yes. ② No.

48. Have you donated to civic groups or participated in civic group activities in the recent 3 year?

① Yes. ② No .

49. Did you vote in the following elections?

	Recent elections	Voted	Did not vote	Don't remember
49-1	2002 Local Elections (June 2002)	●	●	●
49-2	2000 General Election (April 2000)	●	●	●
49-3	1997 Presidential Election (December 1997)	●	●	●

Please answer the following questions that are designed for demographic analysis.

A. Please enter your age. ( ) years old

B. What is your gender? Female ( ) / Male ( )

C. Please select what best describes your work.

- ☐ Professional/administrative position
- ☐ Office worker
- ☐ Service worker/salesperson
- ☐ Production-related employee
- ☐ Government employee/serviceperson
- ☐ A student
- ☐ A homemaker
- ☐ Self-employed
- ☐ Unemployed

D. Where were you born?

- ☐ Seoul
- ☐ Busan
- ☐ Daegu
- ☐ Incheon
- ☐ Gwangju
- ☐ Daejeon
- ☐ Ulsan
- ☐ Gyeonggi
- ☐ Gangwon
- ☐ Chungcheong
- ☐ Jeolla
- ☐ Gyeongsang
- ☐ Jeju
- ☐ Others

E. Where do you currently live?

☐ Seoul
☐ Busan
☐ Daegu
☐ Incheon
☐ Gwangju
☐ Daejeon
☐ Ulsan
☐ Gyeonggi
☐ Gangwon
☐ Chungcheong
☐ Jeolla
☐ Gyeongsang
☐ Jeju
☐ Others

F. Please select the highest degree or level of school you have completed

☐ High school graduate or below
☐ Some university/jr. college credit
☐ University/jr. college graduate
☐ Some graduate school credit
☐ Master's/Doctorate degree

G. What is your monthly income?

☐ No income
☐ Less than 1.5 million won
☐ 1.5–2.5 million won
☐ 2.5-3.5 million won
☐ 3.5-4.5 million won
☐ Over 4.5 million won

*** Thank you for your cooperation! ***

APPENDIX 5
Survey Questionnaire 2005

A Survey on Internet Use and Social Capital

Introduction

This survey is intended to obtain research data for a study of the influence of Internet use on social capital .This questionnaire is designed to get responses from female and male Internet users over 20 years old, who are within the group of people legally eligible to vote in South Korea. From this survey, the researcher is expecting to have useful data in the examination of what relationship people's Internet usages may have on the source of social capital and engagement in political opportunity structure.

Your faithful response won't be a great contribution only to this study which has been regarded as an academic field in its infancy, but also to the cornerstone of expanded academic works related to the social implication of the Internet.

The researcher would swear not to use the data except for the academic research work.

Thank you for taking your time for this

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A The following questions are about your preferred websites and those changes in your social network after using the Internet. Please fill up the blanks and check a statement with which you agree most.

1. How many times per month on average have you visited each sort of websites below over the last year?

1-1. **Public Websites** (e.g. managed government, political parties, civil movement groups): times per month on average

1-2. **Entertainment Websites** (e.g. those websites providing entertainment contents, such as lottery, games, pornography, or celebrity news): times per month on average

2. As you use the Internet in your daily life, there may be changes in your interpersonal relationship with other people or your social network. Please tick a point corresponding to the degree to which you agree with each statement.

	Changes in interpersonal relationship or social network	never agree	<---------		so so	--------->		agree very much
		①	②	③	④	⑤	⑥	⑦
1	I become closer with those people with whom I have stayed in touch.	●	●	●	●	●	●	●
2	I can keep in touch with those people whom I have lost contact with.	●	●	●	●	●	●	●
3	I've got to know new people.	●	●	●	●	●	●	●
4	I can see increase in communication with my family members (who may live with me or elsewhere).	●	●	●	●	●	●	●

5	I've participated more frequently in associations, social gatherings, club meetings.	●	●	●	●	●	●	●
6	There are more people who are helpful to me.	●	●	●	●	●	●	●
7	I have more opportunity to meet people coming from different fields.	●	●	●	●	●	●	●

B **The four statements below are about the way the political process in Korea has been changed by the Internet. Please tick a point corresponding to the degree of your own involvement and to the degree to which you agree with the statement below.**

"The Internet enables people to get a plenty of information about some specific policies or political issues."

		①	②	③	④	⑤	⑥	⑦
1	How frequently do you use such online public information online?	never use	<---------		sometime use	--------->		very frequently use
		●	●	●	●	●	●	●
2	Do you think online public information contributes to the development of politics or public administration?	never contribute	<---------		contribute	--------->		contribute a lot
		●	●	●	●	●	●	●

"The Internet facilitates individual citizen's direct contact with policy-maker or political leader through e-mail or electronic bulletin board."

		①	②	③	④	⑤	⑥	⑦
3	How frequently do you send your messages to policy makers or political leaders through the Internet?	Never send	<---------		so so	--------->		send frequently
		●	●	●	●	●	●	●
4	How much do you think this kind of contact contributes to development of politics or public administration?	Never contribute	<---------		so so	--------->		contribute a lot
		●	●	●	●	●	●	●

"The Internet tends to make the response of public agencies or services requested by citizen more available and convenient."

		①	②	③	④	⑤	⑥	⑦
5	How frequently do you use such services mentioned above?	Never use	<---------		so so		--------->	use frequently
		●	●	●	●	●	●	●
6	How much do you think such online change in the work of public s contributes to development in politics or public administration?	Never contribute	<---------		so so		--------->	contribute a lot
		●	●	●	●	●	●	●

“As the Internet makes it easy to communicate with other people who share similar political opinions, it is a very effective way to mobilize for collective actions in order to appeal against specific policies or to request government actions.”

		①	②	③	④	⑤	⑥	⑦
7	How frequently do you practice such actions? (e.g. writing 100-word comment on newspaper websites, participation in cyber demonstration)	Never practice	<---------		so so		--------->	frequently practice
		●	●	●	●	●	●	●
8	How much do you think such changes contribute to development in politics or public administration?	Never contribute	<---------		so so		--------->	contribute a lot
		●	●	●	●	●	●	●

C **The following questions are about phenomenon in which Internet users establish virtual communities, such as Internet cafe, Internet hobby groups, or online discussion groups. Please fill up the blanks and tick a statement with which you agree most.**

1. How many times per month on average have you participated in activities related to virtual community or online forum (e.g. writing a opinion to online discussion, contributing 100-word comment on news paper websites) over the last year?

2. The followings are some of statements about people's attitude toward online or virtual communities. Please tick a point corresponding to the degree to which you agree with each statement.

		Never agree	<---------		so so	--------->		agree very much
		①	②	③	④	⑤	⑥	⑦
1	In general, I can trust the virtual communities I use regularly.	●	●	●	●	●	●	●
2	No one seems to abuse her or his anonymity.	●	●	●	●	●	●	●
3	There may be few people with indecent motives.	●	●	●	●	●	●	●
4	There may be someone giving a piece of advice worth listening to.	●	●	●	●	●	●	●
5	Most people seem to behave reasonably and not angrily.	●	●	●	●	●	●	●
6	My online activities are not under surveillance.	●	●	●	●	●	●	●

D The followings are reasons using the Internet. Please tick a point corresponding to the degree to which you agree with each statement.

	Reasons for using the Internet	Never agree ①	<--------- ②	③	so so ④	⑤	---------> ⑥	agree very much ⑦
1	To obtain useful information	●	●	●	●	●	●	●
2	To pass the time	●	●	●	●	●	●	●
3	To find someone who shares the same ideas	●	●	●	●	●	●	●
4	To get up-to-date news	●	●	●	●	●	●	●
5	To exchange ideas and information with others	●	●	●	●	●	●	●
6	To persuade others into joining my project	●	●	●	●	●	●	●
7	To learn something new	●	●	●	●	●	●	●
8	To ask others for help	●	●	●	●	●	●	●
9	To escape from my boring life	●	●	●	●	●	●	●
10	To maintain a good relationship with others	●	●	●	●	●	●	●
11	To make life more convenient	●	●	●	●	●	●	●
12	To manage resources in a remote place	●	●	●	●	●	●	●
13	To enjoy something exciting for a moment	●	●	●	●	●	●	●
14	To have conversation with many people	●	●	●	●	●	●	●

E **The followings are some of generally-asked questions about Internet use. Please fill up the blank with relevant numbers and tick a relevant answer.**

1. How many years have you ever used the Internet?

2. How many emails do you write and send per a month on an average? (times per month on average)

3. How many emails do you receive per month on average? (except for advertisement or spam mails, times per month on average)

4. How many times per month on average do you use instant messengers, such as MS messenger, ICQ, Yahoo messenger?(times per month on average)

5. Have you voted in the presidential election 2002?

● ① yes ● ② no

6. How you voted in the general election 2004?

● ① yes ● ② no

F Please the following questions

1. Please enter your age. ( ) years old

2. What is your gender? Female ( ) / Male ( )

3. Please select what best describes your work.

- ☐ Professional/administrative position
- ☐ Office worker
- ☐ Service worker/salesperson
- ☐ Production-related employee
- ☐ Government employee/serviceperson
- ☐ A student
- ☐ A homemaker
- ☐ Self-employed
- ☐ Unemployed

4. Where were you born?

- ☐ Seoul
- ☐ Busan
- ☐ Daegu
- ☐ Incheon
- ☐ Gwangju
- ☐ Daejeon
- ☐ Ulsan
- ☐ Gyeonggi
- ☐ Gangwon
- ☐ Chungcheong
- ☐ Jeolla
- ☐ Gyeongsang
- ☐ Jeju
- ☐ Others

5. Where do you currently live?

- ☐ Seoul
- ☐ Busan
- ☐ Daegu
- ☐ Incheon
- ☐ Gwangju
- ☐ Daejeon

- ☐ Ulsan
- ☐ Gyeonggi
- ☐ Gangwon
- ☐ Chungcheong
- ☐ Jeolla
- ☐ Gyeongsang
- ☐ Jeju
- ☐ Others

6. Please select the highest degree or level of school you have completed.

- ☐ High school graduate or below
- ☐ Some university/jr. college credit
- ☐ University/jr. college graduate
- ☐ Some graduate school credit
- ☐ Master's/Doctorate degree

7. What is your monthly income?

- ☐ Less than 0.9 million won
- ☐ 1–1.9 million won
- ☐ 2–2.9 million won
- ☐ 3–3.9 million won
- ☐ 4–4.9 million won
- ☐ More than 5 million won