E-governance in the New Democracies: The Case of Taiwan

by

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ABBREVIATIONS

ACI-FIND: FIND of Advanced e-Commerce Institute, Institute for Information Industry, the Department of Industrial Technology of Ministry of Economic Affairs

BBS: Bulletin Board System

ARPA: Advanced Research Projects Agency

ARPANET: Advanced Research Projects Agency Network

CEPD: Council for Economic Planning and Development

CyPRG: Cyberspace Policy Research Group

DBMS: Data Base Management System

DPP: Democratic Progress Party

E-government: Electronic Government

E-democracy: Electronic Democracy

EIP: Enterprise Information Portal

G2G: Government to Government

G2B: Government to Business

G2C: Government to Citizen

G2E: Government to Employees

GCA: Government Certification Authority

GDP: Gross Domestic Product
GIS: Geographical Information Systems

GSN: Government Service Network

KMT: Kuomintang

ICT: Information and Communication Technology

IDEA: Improvement and Development Agency

MIS: Management Information Systems

MUDS: Multi-user Domains

NICI: National Information and Communications Initiative Committee

NII: National Information Infrastructure

NRI: Networked Readiness Index

OA: Office Automation

OECD: Organization for Economic Co-Operation and Development

PKI: Public Key Infrastructure

PMI: Privilege Management Infrastructure

R&D: Research and Development

RDEC: Research, Development and Evaluation Commission

TANet: Taiwan Academic Network

WAES: Website Attribute Evaluation System

WMRC: World Markets Research Centre
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It is expected that the ICTs can maximise the benefits for improved governance and electronic democracy in the information age. This study explores the impact of e-government upon citizens and demonstrates how this kind of electronic medium affects the quality of democracy in the context of the new democracies. Taiwan’s peculiar characteristics, which combine a Confucian context, a new democracy and a leading performance in e-government, offers an interesting example of the conceptual diversity of e-government in itself, especially in relation to the level of democracy. Thus, this study uses the Taiwanese experience of developing, using and understanding e-government to identify the effect of e-governance in the new democracies. It integrates larger theoretical and empirical evidence, drawing upon several disciplines, including political science and public administration, communications studies, education and the sociology of technology. The research methods deployed are: documentary analysis, secondary analysis, content analysis and interview. The data are cross-referred and the analysis is presented in different sections.

In this study, four themes are discussed: civil education, the policy initiatives, the public use and the public understanding of e-government. I first indicate that civic education in Taiwan has gradually paid more attention to the mode of participation, but the values supporting democracy have not yet been fully instilled. Secondly, the Taiwanese government has been more inclined to use e-government to reorganise itself than to incorporate more of the public in its operation. Thirdly, democratic participation has not yet extended in the public use of e-government in Taiwan. Fourthly, e-government in Taiwan has a modern format, but lacks political efficacy, since it lacks the mechanisms through which people can affect public policy. I conclude that e-government has been used as a modern means to rework authoritarianism. People suffer from a ‘democratic deficit’ in their understanding and use of e-government. The effects of e-governance have been constrained by the legacy of authoritarianism and the public’s democratic deficit. Therefore, in the new democracies, the prospects of electronic democracy should not be overestimated. E-government may be over-rated as a weapon for consolidating democracy.
CHAPTER 1

INTRODUCTION

Reviewing the work on the social history of the media, Briggs and Burke say that ‘technology both requires and produces social and organizational change’ (Briggs and Burke, 2002: 189). The innovation of technology has transformed in a profound and irreversible way the nature of communication in the modern world over generations. Moreover, as Mechling suggests, modern communications technology challenges all those who claim they have the legitimacy needed to govern (Mechling, 2002: 143). New media technologies may be applied to governance in universal formats, even though the effect of political communication between the governors and the governed may differ according to the cultural and political context.

This study primarily explores the impact of e-government upon citizens and demonstrates how this kind of new electronic medium affects the quality of democracy in the context of one of the new democracies. In this introductory chapter,
I want to lay out the general theoretical foundation and empirical basis for studying issues of e-government related to democracy. I begin by discussing a definition of governance as political communication, followed by an illustration of e-government. The second section maps out the essentials of e-government, including definitions, approaches and its characteristic as an emerging international phenomenon. Thirdly, I identify the democratic values which are applied to e-government and the resultant advantages and shortcomings of e-government. I then turn to the contexts in which democracy and e-government should work. This is my motivation for researching the issue of e-government in the context of the new democracies and for taking Taiwan as an example. Furthermore, I explain the objects of this study and address some of the questions concerning e-government which relate to democratic practice. Subsequently, in the section concerning research structure and design, not only the international benchmarks of e-government but also the Taiwanese government’s assessment of it are discussed. In order to transcend the limitations of these benchmarks, I lay out an analytical framework for this study, followed by a discussion of the choice of methodology and feasible methods of data collection and analysis. Finally, I describe the overall structure of this study and the layout of the chapters which follow.
1.1. Recognition of Governance as Political Communication

The spread of Information and Communication Technology (ICT) has begun to reconstruct politics and civic relations between individuals in society. Political communication is the core of this kind of process, reconstructing the relationship between the government and the public. Since the 1960s, many incremental proposals for enhancing democratic systems of governance by computer-based communication systems have been promoted (Dutton, 1996: 269). Subsequently, the sudden and spectacularly accelerated growth in the use of the Internet since the early 1990s has made this a propitious moment to rethink the subject of governance as an act of two-way political communication.

Governance is generally broadly understood as a process of decision-making, whose powers are allocated within the realms of politics, state administration and bureaucracy. Governance has traditionally worked through top-down methods with hierarchical structures and mechanisms. In the last decade, however, both democratic governance and governance with technology have been widely discussed. For example, the appeal for ‘good governance’, based on the values of participation, inclusiveness, transparency and accountability, creates conditions for the
empowerment of individuals, communities and civil society (Woods, 2000; Okot-Uma, 2001). The government can thus form a dialogical and cooperative relationship with citizens, providing a democratic framework within which political, social and economic priorities are based upon a broad consensus within society. This approach is primarily reflected in citizen-centred governance, which has been closely associated with the reform of the public sector as an aspect of the new paradigm in public administration. Moreover, a new generation of ICTs has increased the potential for good governance and the democratic aspects of governance. Research has begun to explore various applications of ICT and possible consequences for new social movements, interest groups and organizational activism in civil society (Friedland, 1996; Hill and Hughes, 1998; Norris, 2002) and for the processes of policy-making and governing in an information age (Hacker, 1996; Norris and Jones, 1998; Fountain, 2001; La Porte et al, 2002; Kamarck and Nye, 2002). A new culture of participation in the function of governance has developed under the umbrella term of electronic democracy, synonymous with 'digital democracy', 'cyberdemocracy' and 'virtual democracy', among other terms. This calls for a new era with a more radical, participatory polity and fresh forms of public participation.

The exercise of political communication as a system of dynamic interaction involves
both the actors concerned and the media. Each of them is engaged in producing, receiving and interpreting political messages in the process of interaction (Blumler and Gurevitch, 1995). As governance moves toward more democratic forms, an adequate communicative process between the governors and the governed is essential. All voices should be heard in the decision-making processes leading to the allocation of resources. In the information age, the influence of ICTs related to governance lies in interactive and communicative processes. Governance as political communication obviously connects the government and the public. However, the quality of mediated politics depends on how and to what extent the government interacts with citizens. The use of the media can vary, ranging from the traditional mass media to new electronic media. In the last decade, the rapid development, deployment and proliferation of ICTs has heralded new opportunities for governance, political communication and democracy, although it has been debated whether these ICTs and relevant technologies can maximise the benefits for improved governance and electronic democracy in the information age and what institutional arrangements are best suited for this. ‘Electronic government’ (e-government) can be taken as an example to demonstrate how this kind of electronic medium affects the process and structure of governance and, most importantly, the relationship between the government and the public.
1.2. The Case for E-government

1.2.1. Definitions

The term ‘government’ covers several aspects of managing a country, ranging from the very form of government, strategic management, to daily operations. In the information age, adding the adjective ‘electronic’ to the term ‘government’ to form ‘electronic government’ has become fashionable in governance around the world. ‘E-government’ is thus often used as a shorthand form of ‘electronic government’.

E-government can have both broad and narrow definition. The scope of the first extends from the application of ICT to the overall information society, while the second restricts its scope to the Internet itself and focuses on a government’s website.

In the broad definition, e-government is regarded as one of the ways in which ICT is used to promote more efficient and effective government, which incorporates the elements of efficiency and participation in an Internet-based system. According to the World Bank Group, e-government refers to the use by government agencies of information technologies, including wide area networks, the Internet and mobile computing, to transform its relations with citizens, businesses and other arms of government (The World Bank Group, 2003). Deloitte Research also broadly defines e-government as the use of technology to enhance the methods of access to and
delivery of government services to benefit citizens, business partners and employees (Deloitte Research, 2000: 4).

More narrowly, the Organization for Economic Co-Operation and Development (OECD) and the United Nations define e-government in terms of the Internet interface. The OECD defines e-government as the use of information and communication technologies and particularly the Internet, as a tool to achieve better government (OECD, 2003a: 23). The United Nations sees e-government as ‘utilizing the Internet and the world-wide-web to deliver government information and services to citizens’ (United Nations, 2003). Both broad and narrow definitions of e-government include its reliance on ICTs. However, the great stress on Internet-based applications seems to be the core of any definition, which leads many people to simply generalise e-government to all online government websites.

1.2.2. Approaches

E-government is a detailed and complex development. It emerged as an agenda for a general reform of the public sector under liberal democratic political systems during the early 1990s. Subsequently, the appearance of the Internet gave it impetus. In the first place, many pioneering countries setting up e-government aimed to improve the
efficient delivery of public services and the provision of information (Bekkers and Homburg, 2005: 4). Therefore, the vision of efficient, transparent and responsive administrative services provided electronically and closely associated with the reform of governance has become one approach to e-government. As Eifert indicates, most governments embraced this approach because it promised the most spectacular and politically valuable achievements (Eifert, 2004: 1). The resulting benefits, as shown in the improvement of bureaucracy, include cost savings for the administration, gains in administrative efficiency and increased accountability and transparency. In this context, people are perceived mainly as the 'consumers' of public services. They consume the delivery of government goods, such as healthcare information, benefit payments, passport applications, tax returns and so on. According to Hughes, providing services more conveniently reinforces the view of the citizen as customer (Hughes, 2003: 190). Likewise, Deloitte Research pertinently entitled its pilot report on e-government *At The Dawn of E-Government: The Citizen as Customer* (Deloitte Research, 2000). This customer-centric orientation, concentrating exclusively on service delivery, however, fails to capture the complexity of transforming government and makes it easier for the government to dominate, whether it wants to or not (Grant and Chau, 2005: 4).
Although the pursuit of administrative efficiency has been the primary motivation of e-government, a great number of studies have addressed concerns beyond the elements of service delivery and the context of the public sector (Marche and McNiven, 2003; OECDa, 2003) and begun to focus on the incorporation of citizens into the policy-making process (Lee, 2006: 170). This is another approach of e-government, which pays particular attention to civic participation. The themes cover everything from increasing accountability and transparency, facilitating consultation, to civic engagement between governments and citizens (Morison and Newman, 2001; Norris, 2001; Lenihan, 2002; Chadwick, 2003). Such perspectives go beyond simple electronic service delivery and move to various types of public involvement in the policy-making process. From this viewpoint, people, acting as ‘citizens’, are able to influence public policy via rapid and interactive feedback mechanisms such as email, online consultation, online voting and online discussion forums. Therefore, the potential of the Internet, as the government sees it, lies not only in improving administrative effectiveness but also in strengthening public participation.

Despite the differences of approach, a comprehensive definition of e-government has been gradually accepted as being ‘the integration of government services delivery
and civic participation’ (Bertelsmann Foundation, 2001: 12; Layne and Lee, 2001).

This perception of convergence contributes to the goals of more efficient operations, a better quality of service and better quality of civic participation in democratic systems. Therefore, the maturation of e-government is not only to do with making government services electronically available but also with the relationship between government and civil society. Furthermore, it is worthwhile considering the implications of its being a market-based vehicle by which government can provide services for the fundamental democratic values underlying government.

1.2.3. An Emerging International Phenomenon

In practice, the transformation of government into e-government has turned out to be an international phenomenon. The spread of e-government implementation around the world has transcended geographical and cultural boundaries. Many governments throughout the world, including both developed and developing countries, have formulated dreams, visions and plans for e-government. National and local governments have put government information online, automating their administrative processes and interacting electronically with their citizens (Deloitte Research, 2000; Accenture, 2001; Pacific Council on International Policy, 2002; OECD, 2003a). In 2001, the UN E-government Survey listed 143 member states...
which used the Internet in some capacity. In 2003, 173 out of 191 member states (91%) had a website presence, while in 2004, the number of member states with an online presence rose slightly to 178 (93%) (United Nations, 2003: 18; 2004: 54).

Lately, even more countries have made services more accessible through multiple channels and more responsive by providing a portal site. The portal site is even labelled as a sign of ‘joined-up government’ or a ‘one-stop shop’, which aims to integrate the delivery of information and service electronically at a single entry point twenty-four hours a day, seven days a week, for the convenience, effectiveness and empowerment of multiple agencies, businesses and citizens. The establishment of portals is growing in importance as a means of bringing customer-centred functionality to online government services. As Accenture indicates, the leading countries have all begun to consolidate their online service delivery into this next generation of government presence in this form (Accenture, 2001: 9). More and more governments have developed specific national portal sites, which serve as gateways to a number of government services, as well as directories to other government sites. In 2001, according to the global survey of the World Markets Research Centre (WMRC), only 6% of websites featured one-stop services or linked to a national governmental portal (World Markets Research Centre, 2001). When the same
investigation was conducted in the following year by the Centre of Public Policy, based at Brown University, the figure had risen to 14% (Centre of Public Policy, 2002). Subsequently, the UN E-government Survey also indicates that more than one-third of the states maintained an integrated single entry portal. The number of portal sites later increased from 45 states in 2003 to 63 states in 2004 out of 173 (United Nations, 2004: 54).

In looking at the overall performance of e-government by region, North America, Asia and Western Europe have dominated the rankings in the league tables compiled in several global e-government studies. Significantly, two Asian countries, Taiwan and Singapore, have entered the front rank in the global competition for e-government. They have been regarded as strong rivals of most of the leading countries in the West and even at times outstripped some advanced ones in several assessments of e-government over the past few years (WMRC, 2001; Accenture, 2001-2002; World Economic Forum, 2002; Centre of Public Policy, 2002-2005). These results simply prove that they have as great capacity to use e-government as most advanced Western countries with long-established democratic traditions. However, in considering e-government, we need to ask what is the range of diversity of concept and what is its relation to democracy in different countries? Undoubtedly,
the international trend towards developing e-government occurs not only in both the industrialised and the less industrialised countries but has also made a great impact on different political systems. In particular, it should be noted that even some of the less developed democratic nations have surprisingly open and well-developed websites.

1.3. Application of E-government to Democracy

New communication tools have added many meanings to what 'governments' and 'citizens' mean. With the increasing development of ICTs, new media now provide faster transmission, much more space for storage and retrieval, a higher possibility of decentralization and, not least, greater interactivity, than the old mass media did. E-government is regarded by the government as one of the applications of ICTs, especially referring to the Internet, which is able to redefine the relationship with stakeholders in the internal and external environment. As a result, e-government is not simply a traditional government service, but is rather a new medium for political communication, to some extent related to democracy. Conceptually, the changes in the definitions and the approaches of e-government reflect a tendency to pursue democracy in terms of the core areas of governance: efficiency and participation. However, it remains to be seen whether e-government will serve the nature of
democracy or undermine it.

Democracy, based on the principle of ‘government by the people’, has been practised by many countries in different forms, such as liberal democracy, representative democracy, participatory democracy and direct democracy. Democracy is essentially an art of governance: of governing and being governed. The concept of governance has shifted attention from the institutions of the state to its political processes, which also changes the urgent questions to the following: How does the government serve the interest of the people? How do the people participate in making decisions to structure their lives and determine the fate of their society? Such questions imply that, in effect, democratic performance in the polity can be divided into the same two core dimensions: efficiency and participation. The former refers to the decision-making capacity of the government and its ability to ‘deliver the goods’ and services to citizens, while the latter refers to the effective inclusion of citizens in the processes of decision-making with the government.

The pursuit of efficiency is primarily associated with modernisation. When this concept originated, it positively correlated economic development and democracy across time and space. It is argued that the most reliable means of generating wealth
and achieving material prosperity is sometimes the precondition for, as well as the consequence of democratisation (Lipset, 1969). From this perspective, the richer a nation is, the greater its chances of developing and sustaining democracy. Their recent remarkable economic growth has become the impetus for democratic governments to reach stability in some parts of the developing world. Such an argument was reassessed by the political scientist Przeworski and his colleagues who argued that economic development explains why democracy endures, but not why it emerges (Przeworski et al, 2000).

The development of the modern state and the extension of its responsibilities into social and economic spheres led to the growth of powerful government bureaucracies as a sign of the pressure to become more democratic. The emergence of a capitalist economy not only promotes stability in a democracy but also influences the development of its bureaucracy as an administrative tool. The core purpose of government is to govern, to rule and to ensure political stability through the exercise of authority. Frederickson (1996) argues that the effectiveness of democratic government and modern governance for all citizens, not merely for the majority, depends on the energetic exercise of bureaucratic discretion.
A government's efficiency can be judged by its administrative and material performance. However, poor quality administrative efficiency usually accompanies increases in public expenditure and then it becomes necessary to change the form and the operation of bureaucracy. In the last decade, the focus on reducing bureaucracy and improving administrative efficiency through the use of technology and the introduction of the enterprise spirit has become popular. Bellamy and Taylor indicate that ICTs could challenge 'the bureaucratic form of organisations' (Bellamy and Taylor, 1998: 34). Osborne and Gaebler also argue that bureaucracies designed earlier in the century 'simply do not function well in the rapidly changing, information-rich, knowledge-intensive society and economy of the 1990s' (Osborne and Gaebler, 1992: 14).

The increases of efficiency, productivity and effectiveness in the government rely on coordination, including planning, implementing and monitoring and in the sharing and management of information and IT resources by bureaucratic units. The operation requires a flexible networked information system. The introduction of ICT facilitates information flows across government agencies and upsets the hierarchy inherent in the bureaucratic mechanism. The shift from a vertical hierarchy to a more open horizontal model may result in the unintended effect of blurring the lines of
authority and demystifying the complexity of an established governing structure. A great number of the studies on the democratic impact of e-government concentrate on the reform of public administration from the perspectives of strategy, implementation, leadership and collaboration (Margetts, 1999; Heeks and Davis, 1999; Fountain, 2001, 2002; Bovaird, 2003; Bekkers and Homburg, 2005). Following the bureaucratic changes, the resultant benefits of e-government include: enhanced government accountability, resulting in a more accurate and efficient delivery of the services which improve the functions of networking and transparency in the administration of government. These advantages reflect the essential capacities with which a democratic government should be equipped. However, the dominant discussion about applying e-government to the aspect of efficiency concerns the mechanisms for delivering services to and making transactions with citizens. There is less discussion concerning the transformative process where citizens engage in the activities of government.

The notion of participation retains its status at the heart of democracy. As Arnstein says, ‘participation in government is, in theory, the cornerstone of democracy — a revered idea that is vigorously applauded by virtually everyone’ (Arnstein, 1969: 216). Developing democracy demands of citizens a more widespread involvement,
'taking part in the formulation, passage or implementation of public policies' (Parry, 1972: 5), instead of being merely passive recipients of decisions made by others on matters which affect their daily lives. Therefore, the discussion on participation emphasizes the way in which citizens may be empowered and increase their personal autonomy in making decisions together with the government. It is the means by which people as citizens can instigate significant social reform which enables them to share in the benefits of the affluent society (Arnstein, 1969). From this perspective, participation is a communicative process in which individual citizens present their wishes to the representatives of political authorities. The government then looks much more like a kind of political community in which citizens have the capacity to participate, instead of being passively served by the state as agent. Such content can be significantly interpreted from the perspective of citizenship, which depicts citizens as the members rather than the objects of a political community or society (Walzer, 1989). Participation reflects best the adjustment of citizens' status from passive customers to active citizens.

Compared to other traditional forms of participation, new communication technologies create a more interactive and immediate platform and allow two-way communication. Many types of ICT application, such as interactive websites, email,
MUDS (multi-user domains), online opinion polls and online referenda, form a mechanism which allows response and consultation. The foundational technique of these applications is interaction. As Coleman indicates, the unique benefit to be gained by citizens who use the Internet as a democratic tool is interactivity and a more responsive relationship with their representatives (Coleman, 2004: 19).

The potential for comprehensive change through e-governance lies not only in the simple electronic delivery of services but also in the promise of wider interaction with citizens. Due to its interactive capacity, it is believed that e-government can serve as a democratic medium to improve the openness of government and enhance its accountability to citizens. A great number of studies on e-government pay particular attention to civic engagement in terms of format, resources, political knowledge, political support and political activities (Norris, 2001; Dahlberg, 2001; Lenihan, 2002; Oblak, 2003; Chadwick, 2003; Coleman, 2004). The resultant benefits include: increasing accountability and transparency, greater public autonomy, the provision of equal chances for all voices to be heard, the chance of consultation within the civic engagement between governments and citizens. For example, the establishment of online consultation, online polls and online discussions on government websites creates more opportunities for citizens to deliberate and make
direct decisions, exemplifying active citizenship. The participants in e-government may contribute to agenda-setting, defining priorities, informing political bodies about all kinds of preferences and indicating how desired policies should be implemented, available for the decision-makers to refer to.

The focus on participation through new technologies is particularly significant for the advocates of direct democracy or 'strong democracy'. The fulfilment of the participatory potential of new technologies is often presented in the form of the 'electronic public sphere' and expected to adopt the image of 'electronic democracy' as a more direct democratic model (Barber, 1984; Grossman, 1995; Budge, 1996). Although they approach the impact of new technologies on democratic changes slightly differently, they all agree that interactive communication channels can amplify the voice of citizens. For example, Barber says: 'interactive systems have a great potential for equalizing access to information, stimulating participatory debate across regions and encouraging multi-choice polling and voting informed by information, discussion and debate' (Barber, 1984: 276). Moreover, new technologies transform the role of citizens in the political process. As Grossman indicates, citizens will not only be able to select those who govern them, but increasingly they will also be able to participate directly in making the laws and policies by which they are
In modern Western political thought, liberal democracy and direct democracy represent two mainstream strands of democratic theory and practice. The liberal model of democracy, synonymous with a 'representative democracy', is the ability of the elected representatives to exercise their power of decision making, subject to the rule of law. All policy decisions are made by the representatives and the government they support, and citizens' involvement is limited to choosing representatives (Budge, 1996: 43-45). Proponents argue that such indirect representative processes constitute the only practical form of democracy, that they balance accountability with the expertise of professional representatives while avoiding the dangers of intolerance and conflict that may accompany mass mobilisation. However, this model has often been criticised for its tendency towards elitism, implying that elected representatives often do not represent the 'will of the people' (Michels, 1962). Because real power is, in fact, held by a small number of people, the model of liberal democracy is even regarded as the mere decoration of an oligarchy. Other flaws resulting from representative democracy include corruption, lack of transparency, sound-bite politics, a conflict of interest between elected representatives and their constituents, limited representation of public opinion and so on.
The alternative form of representation is direct democracy, synonymous with a 'participatory democracy', 'a regime in which the adult citizens as a whole debate and vote on the most important political decisions, and where their vote determines the action to be taken' (Budge, 1996: 35). Unlike representative democracy, the distinctive feature of direct democracy is its participatory character, the involvement of all adult citizens in directly debating and authoritatively deciding all the most important policy questions. The direct popular participation is implemented by various means, such as referendum and plebiscite. However, direct democracy has been queried for its limited scale, its tendency towards demagoguery, the difficulty of translating the complexity of public policies into popular choices, voter apathy and fatigue, amongst other things.

This contrast between the ideal types of liberal democracy and direct democracy has dominated much political science debate, and both strands have been echoed in discussions of e-democracy. As mentioned earlier, however, many scholars have begun to think that direct democracy is now technically possible through the assistance of interactive communication media; ICTs can thus enhance the deliberative process. The Internet, for example, has been seen as a tool for refashioning and strengthening the hitherto weak and neglected relationship between
representatives and represented (Coleman and Gotze, 2001). This notion has become the common ground of the advocates of e-democracy.

An outline picture of participatory e-democracy was begun with the proposal of ‘electronic town halls’ by Ross Perot during his 1992 and 1996 Presidential campaigns in the United States. One early experiment in e-democracy is the Minnesota E-Democracy Project, which began in 1994. It was an electronic meeting space where candidates could answer public questions and critique their opponents, and where citizens could find detailed information on Minnesota politics, comment on the candidates, and discuss the democratic process. Across the Atlantic, the first experiments in using the Internet to facilitate public input to the UK Parliament began in 1998. From then to 2002, ten online consultations were run by or on behalf of the Parliament. These consultations were designed to recruit participants with experience or expertise in relation to specific policy issues.

These developments can be linked to the argument that democracy should be reconceived as a double-sided phenomenon: concerned with the re-form of state power and with the restructuring of civil society (Held, 1996: 316). It is likely that the appearance of e-democracy could make possible a hybrid democratic model
containing elements of both liberal and direct forms of democracy (Hague and Loader, 1999: 7). From this perspective the government should thus reform its form both to circumscribe its power, to strike a balance between individual autonomy and central authority and to make its business accountable to all citizens, and to facilitate the participation of people in a process of debate and deliberation about matters of public concern. In approaches to e-government, the pursuit of reinventing government responds to the former appeal, while the establishment of online consultation mechanisms reflects the latter argument.

Ideally, e-government has the potential to increase political participation and can reshape the state into the form of an open, interactive network, as an alternative structure to the previous traditional, hierarchical and bureaucratic ones. In the implementation of e-government, there is positive modification of the supervisory roles and hierarchical relations within and outside the government. The effect of e-government, moreover, includes 'modernisation of the nature of authority structures and systems' (Fountain, 1999: 139). The purpose of e-government is to optimise its internal and external relations and lead to greater trust between them. It can then connect the representatives with the represented and thus enrich democracy.
Nevertheless, it should be noted that e-government is not a universal panacea. It is only a tool, albeit a powerful one. Some scholars tend to see this kind of new technology as the result of undermining democratic values instead of supporting them. First, e-government may result in social and political inequity, for unequal competence, as much as unequal access, is a threat to democracy. The idea is evolved from the issue known as the ‘Digital Divide’, which limits the accessibility of the physical infrastructure, IT literacy and related skills. New information technology is likely to reinforce pre-existing inequalities both within government and between government and citizens (Danziger et al, 1982; Lax, 2001) and to widen the gap between information ‘haves’ and ‘have-nots’ (Rabb et al, 1996: 285). Those citizens without ready access to the Internet infrastructure, which forms the base of e-government and those citizens with little or no relevant IT literacy and skills, will find it difficult or impossible to operate e-government. As a result, they may become more deeply alienated from the political process and thereby more marginalized from civic life, due to being deprived of such access. This could result from nothing more than discouraging their interest in accessing public affairs but it amounts to a kind of disfranchisement. E-government then intensifies the unequal effects on civic engagement and democracy. Therefore, social inequities may not have diminished with the development of e-government, but rather the reverse.
In addition, political inequality results from the dominance of the managerial approach in the implementation of e-government. Because governments are liable to a one-sided effect from e-government, the digital divide tends to deepen and thus the treatment of citizens as clients becomes much more pronounced (Snellen, 2002: 197). Providing services more conveniently does in fact reinforce the view of citizens as customers; concentrating upon the production processes is very much a part of managerialism (Hughes, 2003: 196). Making extensive and effective use of e-government has been associated with ‘joined-up governance’ provided in a virtual way simply as a government product which is also consumer-friendly. However, such an orientation raises the potential for blurring the roles of the citizen with those of the consumer, ‘possibly at the cost of a robust, informed and engaged citizenry’ (Seifert and Petersen, 2002: 209). This threatens to turn representative democracy into a highly managed form of consumer democracy, as predicted (Bellamy and Taylor, 1998: 117); it forms a consumer nexus largely around the consumption of public services. The dominance of managerialism is always at the expense of consultative and participatory possibilities. In a comparative analysis of e-government within the United States, Britain and the European Union, Chadwick and May indicate that e-government, with its dominant managerial discourse of cost cutting and efficiency, reinforces the existing power structures rather than implementing the democratic
vision (Chadwick and May, 2003: 296). Therefore, if existing administrative mechanisms remain the established norm (e.g., the agent-state model), the progress of e-government will bring about utopia, but only for the privileged sections of society.

Second, there is another cause for scepticism. This concerns the possibility of 'freedom of information' through ICTs. Technological advances in cyberspace increase the chance for surveillance and political control, thereby raising people's distrust of the government. There is potential for the Orwellian implications of 'Big Brother'. ICTs are likely to intrude upon personal privacy and increase surveillance and control over persons and groups (Rabb 1997: 155-6). Lyon (1994) frankly points out the attendant invasion of privacy and unwarranted surveillance of individuals in a networked information culture, both of which are of course incompatible with liberal democracy. The Internet makes surveillance easier than before, allowing the state as well as corporations to invade individual privacy (Spender, 1995). The electronic delivery of services in e-government has further expanded government's chance to collect personally-identifiable data. For example, transactions in e-government involve the integration and sharing of data across bureaucratic domains. The process of giving personal information online leads to online security becoming one of the
most worrying issues (WMRC, 2001). Another example of surveillance is that electronic activities tend to leave what are called ‘cookies’ or electronic residues, which carry the details of a site visitor. It is likely that an unscrupulous government can trace everyone who uses e-government and thereby monitor online public opinion in the discussion forums and thus control the consultative mechanism. The issue of privacy embodies the premise of trust and confidence between citizens and the government. People are already anxious about the way in which their personal information and transaction records can be investigated. As a result, they will not entrust sensitive personal, financial and medical data to the government even in order to utilize e-government systems or they will refuse to give accurate information unless they are assured that the information will be responsibly used and protected against abuse (Demsey et al, 2003).

The anxiety over surveillance also applies to the transparency of government information. The government may to some extent protect government information by invoking national security or personal privacy in response to the demand for public access to government information. The government claims that it wants to protect e-government sites from hackers or information misuse by terrorists. In the United States, in particular, large amounts of information which used to be freely available
on government websites are no longer available, now that former open sites and open information have been taken offline since 9/11 (Riley, 2003). In order to track the people who are suspected of any connection to terrorist groups in the US and abroad, the US government with other governments, such as Canada, the United Kingdom, France and Australia, have also planned to regulate the information on the databases both in the public and the private sector through legislative measures. In addition, the degree of transparency with e-government is questioned, because selected information may be a tactic for the government to intentionally control its people's minds. The transparency of information must therefore be sacrificed. E-government promises to be open government, yet the transparency of its information is influenced by people's suspicion of political control. Therefore, a lack of transparency ensues, which can conceal official graft or favouritism (InfoDev and Centre for Democracy and Technology, 2002).

Information technology is a double-edged sword. Fountain noted a balance of advantages between electronic government and electronic civic society: 'technology may be used for surveillance, monitoring, control, and disinformation as easily as it might be leveraged to promoted transparency, accountability, and access to information that promotes human development' (Fountain, 2003).
1.4. Research Motivation

According to Fountain (2003), the debate on democracy in e-government and electronic civics lies in the political uses to which communities and interest groups put the Internet and in the long series of consequent behavioural and structural changes in government rather than the mere provision of government information and services on-line. She implies that the importance of contextual factors in the content of e-government is greater than most people think. The changes of behaviour and structure are heavily influenced by the political environment, which is shaped by a variety of political systems and political culture.

There is unending debate about whether e-government supports democracy or undermines it. It should be noted that the pros or cons substantially derive from the long-established democratic traditions in the West. Most of the empirical studies simply concentrate on developed nations with liberal democracies, whose e-government is equipped to a certain degree with such democratic characteristics as openness and accountability (e.g., Chadwick and May, 2003; Dunleavy et al, 2003). Moreover, the Internet infrastructure and the major incentive for reinventing government, which e-government most relies on, originated from these democracies. Not surprisingly, although studies on e-government have proliferated, many of them
tend to comment on the issues in terms of Western understanding alone.

In the wake of globalisation, the idea of e-government has become an integral part of the modernisation efforts undertaken by countries with a variety of political systems. The United Nations even claimed that 'the promise of e-government is that it offers an historic opportunity to make the impossible possible for developing countries' (United Nations, 2003: 8). The creation of e-government is not a privilege reserved exclusively for democratic countries. Many non-democratic countries, including semi-authoritarian and authoritarian countries, have adopted e-government initiatives partly to catch up with this global innovatory trend. Studies on e-government in established democracies and authoritarian regimes have proliferated. However, somewhere between these two groups, there are the new democracies; how do they regard e-government and implement it? What impact does e-government have on the political system and civil life in these new democracies, since their success in adopting e-government initiatives and implementing them has been variable? The role of the media in the new democracies has different implications from that in established democracies and authoritarian regimes. As mentioned earlier, among the various global assessments on e-government, a few new democracies have proved their strong potential in deploying e-government, as have many other advanced
Western countries with long-established democratic traditions. However, can e-government be fully grafted onto these new democracies?

Taiwan is of great interest in the study of e-government in relation to democracy. Taiwan has not only taken its place among new democracies but also achieved a remarkable success in the performance of e-government, according to many international assessments within recent years. Perhaps e-government will in the end be adopted universally, yet its impact upon political systems and societies reflects different political and social contexts. A few Asian countries have gradually climbed as high as the leaders in digital government in the past few years. In 2005, there were 4 East Asian countries out of the top 5 in digital government. The United States ranks third behind Taiwan and Singapore and is just ahead of Hong Kong and China (Centre for Public Policy, 2005). By coincidence, these East Asian states share Confucian traditions, albeit in different political systems and fierce debate on democracy has always continued in these countries. However, there is one rare case of a new democracy within the context of Confucianism which adequately applies e-government as a new instrument of political communication. Taiwan's peculiar characteristics, combining a Confucian context, a new democracy and a leading performance in e-government, offers an interesting example of the diversity of
e-government in itself and in relation to the level of democracy.

In the world map of democracies, Taiwan has attracted the attention of the Western world as a new young democratic country. Over the past few decades, the political system in Taiwan has turned from what looked remarkably like a Leninist one-party state or a quasi-Leninist regime into a working democracy (Cheng, 1989; Robinson, 1991; Tsang, 1999; Rigger, 2000). In the Western sense of the word, the Taiwanese history of a smooth transition from a one-party monopoly regime to a range of different one-party or dominant-party experiences can be instructive for other Chinese societies and those who theorize about supposed 'Asian values' or the 'clash of civilizations' (Whitehead, 1999: 168). In the last decade, in particular, Taiwan took several steps toward democratisation. The first direct presidential election was held in 1996 and is regarded as the end of the transition to democracy (Rigger, 2000: 137) and also 'an important step on the road to democratic consolidation' (Diamond and Plattner, 1997: xli). Following the presidential election in 2000, the result completely reversed over half a century of one-party dominance in Taiwan, leading many scholars to point out that democracy in Taiwan now appeared consolidated (Chu, 2001; Chu et al, 2001; Rawnsley, 2004). This was considered a milestone in the process of democracy in Taiwan.
Furthermore, the Taiwanese government, like many other governments around the world, has been setting up its ‘e-government’ initiative since the mid-1990s. By 1997, it was listed as one of the governments most heavily involved in this technology (Demchak et al, 2000: 14). Amongst the advanced e-government countries, Taiwan has recently achieved remarkable scores in many international assessments. The WMRC ranked Taiwan as the second best in e-government out of 196 nations in 2001, while the Centre for Public Policy based at Brown University assessed it from 2002 to 2005 as best out of 198 nations, apart from 2003, when it came fifth (WMRC, 2001; Centre for Public Policy, 2002-2005). The Taiwanese government loudly vaunted its success in e-government.

A good deal of research has explored the political changes in Taiwan, both in Western and local academic circles. However, many existing studies on Taiwan’s e-government have failed to link e-government and democracy together. As the OECD notes, the international benchmarking studies always measure a country’s overall performance on the basis of only a small number of elements (OECD, 2003a: 139) and can give only a superficial picture of e-government (ibid, 24). They do not usually take into account a country’s priorities, service quality or more profound factors, such as local politics, the political and social systems or the current political
Many studies on e-government in Taiwan continue to neglect the issues indicated above. Most of the scholars in Taiwan, especially in the field of public administration, have overwhelmingly accepted the claim, imported from the West, to be reinventing government or new public management. They are mainly concerned about the issues relating to the delivery of government services, such as their application to government restructuring, the knowledge management of the public sector, the goals of policy, the usability of government websites and the customer-oriented management model. (Shih and Li, 1999*; Lin, 1999a*; Huang, 2001*; Tsai, 2002*; Liu and Lai, 2004*). Research on the supply side (i.e., the government) has become the mainstream concern in the various studies on e-government in Taiwan. This substantiates another of the OECD's critiques of current international benchmarking studies, which tend to focus on the supply side and do not generally include the demand for and use of e-government (OECD, 2003a: 138).

Where do the demand for e-government and its use come from? The education of a suitable population plays an important role. In the analysis of the relationship

* The use of a symbol – an asterisk – denotes throughout that the original data were in Chinese. The English references were translated by me. In the following text of this study, I consistently use an asterisk to indicate that the data, such as quotations, titles, interviews and speeches, were originally in Chinese. The reader will be reminded of this below when I deal with Chinese sources.
between democracy and participation, Brennan says: 'participation requires appropriate knowledge, skills and attitudes and a useful beginning might be made in a determined attempt to development through political education in the schools' (Brennan, 1982: 119-120). Many studies on e-government around the world have observed that participation in e-government for democracy is relatively low, but they fail to take the demand and the use for democracy itself into account. Most of them thus preferred the easy solution of increasing IT literacy to the more difficult one of enhancing fundamental civic education as a way of supporting a public interest in democracy.

In Taiwan, a few scholars have begun to look at the demand side and have examined the democratic aspects of the government websites, such as the importance of public opinion, deliberative discussion and open government (Lin, 1999b*; Lin, 1999*; Pan, 1999*; Shu, 2000*; Weng, 2000*). However, they rarely touch the online democratic mechanisms related to the political system or the users' participation in the current political culture. Obviously, they tend not to deal with the structural factors underlying e-government. Although some of them have addressed the issue of raising IT literacy, civic education has never been one of their concerns. None of the studies and assessments on e-government in Taiwan has yet taken seriously the origins or the
enhancement of democratic values or political culture.

In consequence, to understand the impact of e-government upon the citizens in a new democracy, it is useful to take the Taiwanese experience as an example for discussion and analysis of practical participation in social and political life through the use of e-government. For the sake of a fuller understanding, this study also considers the context in which the salient factors relate to people and e-government, rather than simply taking for granted the presence of e-government in Taiwanese society.

1.5. Research Objectives and Questions

This study takes a holistic approach to e-government from an interdisciplinary perspective. I do not treat e-government as a necessity in a new democracy. Rather, I consider a number of contextual factors, such as initiatives, objectives, infrastructure, the environment of the implementation and the human resources available, among other things, to form a comprehensive perspective from which to look at e-government. Furthermore, a single discipline cannot adequately interpret social reality with any comprehensiveness. The theme of e-government is too complex to yield to the interpretive techniques of any single field of exploration. As a result, this study draws upon several disciplines, including political science and public
administration, communications studies, education and the sociology of technology.

The essential definition of democracy is 'government by the people'. 'The people' are always the ones who should use e-government to exercise democracy. If one regards e-government as a bridge in the communication between the government and the public, its end users are the people. As will become clear, I hope, in the course of this study, it is well recognised that changes involving ICTs need to be accompanied by changes in people, either in their actions or their thinking. Merely introducing e-government without considering the public responses to it will not produce the desired improvements in a democratic society. Therefore, I pay attention to the public demand for and use of e-government but always in relation to governance and the social and cultural circumstances. This study aims to identify what needs to change in Taiwan's utilisation of e-government for its new democracy. Furthermore, this study seeks to refer to the case of Taiwan to stimulate the following discussions in the context of the new democracies.

This study seeks to answer research questions on two levels.

Firstly, on the primary level, the normative questions are as follows:

1) What are the effects of e-government upon citizens in a new democracy?
2) Can the implementation of e-government be used for creating, enhancing or consolidating democracy?

Secondly, on the secondary level, the applied questions have particular reference to the case of Taiwan, encompassing the four themes of civic education, policy initiatives, public use and the understanding of e-government in Taiwan. To this end, the following questions are asked:

1) What have people in Taiwan learned about democracy?

2) How does the Taiwanese government initiate policies to develop and manage e-government projects, so as to present them to the public?

3) What are the patterns of the Taiwanese people’s use of e-government?

4) What do people in Taiwan demand, understand and experience in e-government?

1.6. Research Structure and Design

1.6.1. International Benchmarking for E-government

In the process of public policy, from initiation to implementation, it is necessary to regularly evaluate the progress and effectiveness of the objectives of new projects; the makers of policy should understand the public’s demands and the impact of new
projects upon the public. Without them, the policy-makers cannot justify the continuity of the initiatives and properly allocate expenditure. Measuring progress is a common way of determining the success of a national policy. The development of e-government is no exception.

In the many evaluations of international investigations and benchmarking studies of the progress of e-government, the criteria proposed reflect the differences between people's definitions. Some of them broadly examine the role of e-government in the information society, while others narrowly concentrate on the presence of a government website. Broadly speaking, such studies often refer to an evaluation of national policies with reference to the information society. The common indicators include: telecommunication infrastructure, the use of ICTs, Internet penetration, the costs to government of delivering services, the number of agencies and functions online, legislation for e-government, the IT skills required and so on. More narrowly, evaluating e-government often refers to the assessment of the elements on government websites. The common indicators include: the function of the websites, the content of online services, the layout of the websites, the average time for processing citizens' requests or applications, citizen participation in consultations and comments and so forth.
On the whole, the dynamic and the diffusion of ICTs have made a great impact upon the development of any nation which has shaped an information society or a networked world. E-government is generally regarded as one application of ICTs, which is often listed in numerous indicators under the overall evaluation of an information society or networked nation. The World Economic Forum and the Center for International Development (CID) at Harvard University (2002) devised the Networked Readiness Index (NRI) in assessing 75 countries according to their capacity to take advantage of ICTs networks for social and economic advancement.

The data were drawn from two sources. First, they came from statistical surveys conducted by other international organisations, such as the World Bank, the International Telecommunications Union, Freedom House and the Business Software Alliance. Second, they came from the World Economic Forum and questionnaires which the CID distributed to more than 4,500 business and government leaders in the surveyed countries.

In the NRI, two component indexes are taken into consideration: network use and enabling factors. The ‘network use’ is assessed so as to measure the extent of ICT proliferation in a country. It consists of five sub-indices: Internet users per hundred inhabitants; cellular subscribers per hundred inhabitants; Internet users per host;
percentage of computers connected to the Internet and availability of public access to the Internet. The 'enabling factors' reflect the conditions for the quality of network use and proliferation in a country. Four sub-indices have been devised: network access (information infrastructure and hardware, software and support); network policy (ICT policy, business and economic environment); the network society (networked learning, ICT opportunities and social capital) and the network economy (e-commerce, e-government and general infrastructure) (Kirkman et al, 2002: 13-14).

This index focuses not only on technology but also on the organisational and human variables related to individual capabilities for translating vision into action. Therefore, there is no single factor for determining the impact of ICT upon a country. The influence of e-government reflects one aspect of the progress of the networked nation.

Another global survey of e-government, containing 191 member states of the United Nations, is the work of the United Nations and the America Society for Public Administration. The survey assesses not only e-government readiness but also the extent of e-participation. The methods used are very similar to those of the NRI. Besides questionnaires, the data derive from the statistics of the United Nations, including the United Nations International Telecommunication Union, the United

This survey uses a quantitative index combining two aspects. One is the state of e-government readiness and the other is the extent of e-participation. 'E-government readiness' means the capacity or aptitude of the government to use ICT for encapsulating public services and making them public. The e-government index is composed of the website presence, the telecommunication infrastructure and human capital. Moreover, 'e-participation' is defined as a 'participatory, inclusive and deliberative process of decision-making'. Namely, the survey examines the willingness of a government to use ICT as an information provider and its set of participatory tools for empowering people in consultations and decision-making. Therefore, the index of e-participation is divided into three sections: e-information, e-consultation and e-decision. A total of 21 public informative and participatory services and facilities are assessed across six general, economic and social sectors, which are: general, education, health, social welfare, finance and employment. It should be noted that assessing e-government readiness takes note of the quantity of information and services provided. However, there is also an index of e-participation, which evaluates the same aspect as above but adds a qualitative approach to

The aspects covered in the survey of the United Nations and the American Society for Public Administration are less comprehensive than that of the World Economic Forum and the Center for International Development and also focuses on e-government. Although the overall e-readiness or the broader ICT environment paves the way for the progress of e-government, the measurements of human capital and of website presence can pertinently reflect the relationship between the government and the public. Furthermore, the design of the ‘e-participation index’ not only responds to the progress made by government websites but also indicates the possibility of online public involvement. E-government is thus considered to be a means of contributing to human development in this area.

The presence of a government website is an essential indicator in a number of studies of the status of e-government. This reconfirms the narrow definition of e-government used by the OECD and the United Nations, which focuses on the Internet alone. Several international surveys have examined the stage of development at which each service is offered online. Most of them create a similar model in order to assess the development of e-government. For example, the global survey of the United Nations
applies a five-stage model, moving from emerging presence, enhanced presence, interactive presence, transactional presence to networked presence (United Nations, 2003), while the OECD has adapted a four-stage model from the Australian National Audit Office, encompassing the levels of information, interactive information, transactions and data sharing (OECD, 2003a: 73-74).

Moreover, the online availability of public services is determined by the extent to which it is possible to provide a service electronically. The report of Accenture takes into account the number of public services which are available online (service maturity breadth) and the level of completeness of each online public service (service maturity depth). Service maturity breadth is divided into three levels: publishing, interacting and transacting; while service maturity depth is measured in terms of insight, interaction, organization, performance, customer offerings and networks (Accenture, 2002: 4). The eEurope report, the Web-based Survey on Electronic Public Services, also measures the levels to which a government has developed an online presence. The report evaluates the percentage of basic public services available online (Cap Gemini Ernst & Young, 2001: 3-4). In this report, the four stages of online sophistication of these services have been listed as: information, interaction, two-way interaction and transaction.
It seems that there is no general agreement in defining the stages of online service presence (OECD, 2003a: 73), but the presence of a framework of stages can prove the evolutionary nature of e-government. It should be noted that the development of the websites may not follow a true linear progression. Moreover, different countries have different priorities in national policy, as shown in approaches taken at different periods. It may be more appropriate to refer to the national policies than risk jumping to a wrong conclusion by measuring only the presence of government websites.

In addition, some studies concentrate on the features and elements shown on the government websites at some given point rather than assessing their stages chronologically. In their annual investigations into global e-government, the WMRC and the Centre for Public Policy, based at Brown University, evaluate the presence of government websites according to three dimensions: information availability, service delivery and public access. Six criteria are employed, as follows: online service, privacy and security, disability access, foreign language access, advertisements and user fees and public outreach. A total of 24 features have accordingly been assessed in detail. The units of analysis are restricted to the level of central government and major agencies serving crucial functions of government. Government websites for subnational units, obscure boards and commissions, local government, regional units
and municipal offices are excluded (WMRC, 2001; Centre for Public Policy, 2002-2005). These reports, however, overemphasize the content of online services and technical levels, consequently leaving out local layers of e-government. Moreover, while the government portal site has been highlighted as a mainstay of e-government, the reports list it only as a feature of the internal link. However, if the portal site is to be a single window and one-stop service, its content should be evaluated along with that of other central government websites. Interestingly, the team of Brown University also undertook an email responsiveness test to measure public sector responsiveness to email questions and to measure how long the responses took. The email test reflects an aspect of administrative efficiency in response to a public request, albeit not a comprehensive one. Efficiency, closely associated with modernisation, is believed to be one of the elements of democracy.

Some studies incorporate other elements of democracy into their assessments but still base them on the presence of government websites. The Arizona-based research team, CyPRG (Cyberspace Policy Research Group), for example, has tracked the spread and deployment of the web in 192 governments since 1996 and developed the Website Attribute Evaluation System (WAES) to assess the contents and format of national-level e-government websites according to two principal criteria:
transparency and interactivity. The criterion of transparency lists many indicators, such as site ownership information, the organisational or operational information provided, relevant connections and the frequency of updating. As regards the criterion of interactivity, the indicators include the provision of links and opportunities for input, reachability, the degree of navigating organisational or operational information and responses (CyPRG, 1998). The WAES, at least, does not simply treat information transparency as a necessity but also exploits the relationship between government departments and citizens through the evaluation of interactivity. Looking at the elements of transparency and interaction goes far beyond the efficient provision of administrative services, which is regarded a step into the domain of e-democracy.

In Norris' study on the rise of e-governance, she brings in the WAES to a discussion about the democratic functions of government websites and significantly incorporates levels of democratisation, indicators of technological diffusion and socioeconomic development. She looks not only at the functions of government websites but also takes account of contextual factors. She measures five dependent variables: the total number of government websites; the number of national-level government websites; the content analysis indicators of government information
transparency and communication interactivity; and the overall e-governance index (Norris, 2001: 125). All these different indicators plausibly explain the distribution of government websites. In fact, they indicate not only what preceded this situation but also the fact that current conditions tend to be reinforced. Nevertheless, this study does not review the consequences of these developments for political systems and no conclusions are reached about the contribution of civic participation via e-government to the process of decision-making.

The WAES and its application to Norris’ study lay stress on the democratic function of government websites. Administrative function is another focus of e-government. Modernisation and democratisation always coexist, but still must be carefully balanced and harmonized. The Bertelsmann Foundation examines these two features simultaneously on the basis of the presence of a portal site. Its study, *E-Government - Connecting Efficient Administration and Responsive Democracy*, indicates that a balanced e-government is a combination of electronic information-based services for citizens (e-administration) and the reinforcement of participatory elements (e-democracy). The study describes the latest approach of e-government, looking at various e-government services and analyses the presence of 12 national portal sites and local government sites in Northern America and Europe. Five fields are assessed,
namely, benefits, efficiency, transparency, participation and change management.

1) Benefits: availability of government services and the resulting advantages.

2) Efficiency: actual improvements in efficiency.

3) Transparency: information about accessing public institutions and the follow-up processing of a query.

4) Participation: the means for individuals to influence the system and the extent to which they can.


The study indicates almost all possible themes of e-government and identifies the key principles which an e-government strategy must satisfy. The aspects of ongoing development in the investigated services from their conception and whether they are constantly checked are fully covered. However, the selection of case studies is limited to a few countries which share similar democratic systems and the study more or less excludes different political systems. The consequences of modernising democratisation may not be the same for political systems which differ radically
Each of the international benchmarking studies on e-government has its own traits and blind spots. As the OECD comments, most of them to date lack accuracy and are judgmental, so they can conceal as much as they reveal (OECD, 2003a: 138). E-government, as we have seen, can be defined both broadly and narrowly. The implementation of e-government can be expanded to encompass a broader vision of the information society or narrowed down to the presence of a government website. Accordingly, ways of assessing e-government can be different in design. As countries take different approaches to e-government, finding common measures between them becomes more difficult. Finding effective and comparable measures is also difficult when dealing with complex variables, such as the balance between quality and quantity of services online. Therefore, the quantitative and qualitative indicators are both important and can add value to the implementation. Assessments of national policies can take account of countries' priorities, approaches or e-government objectives, while examining activities can ascertain whether or not the use of e-government is effective. Moreover, it is vital to assess e-government with respect to the context in which it is applied. Although many studies envisage the possible progress of e-government, its applicability to different countries may be related to from democratic systems.
many contextual factors, such as political systems, social background, literacy levels and public perceptions.

1.6.2. Institutional Assessments of E-government in Taiwan

Since first introducing the idea of e-government in 1997, the Taiwanese government has initiated many e-government projects at different times. Subsequently, in order to assess the effect of this step, the authorities have developed different methods and performance indicators to measure the implementation of e-government. This institutional assessment can provide helpful guidance in developing and refining e-government for the policy makers.

For the authorities, the primary concern in e-government is the network capacity and service infrastructure. The government's own definition concerning e-government suggests such an interest.

'E-government refers to the application of information and communications technology by government to link networks and deploys a variety of service infrastructure, including voice telephony, ATMs, the Internet and information kiosks, for the purpose of providing extensive, proactive service not subject to the constraints of time or geographical location' (Research, Development and Evaluation Commission, 1997*;
Accordingly, the institutional assessment of e-government puts the onus on government to build a suitable service infrastructure and to provide the opportunity for a variety of uses, particularly Internet use. In the first e-government project, the *Mid-term E-government Implementation Plan*, published in 1997, the authorities developed seven quantitative indicators: the number accessing the Internet in the government agencies, the number of linking Internet hosts in government agencies, email users, the rate of electronic official document exchange, the number of electronic files across government agencies, the elimination of official documents and the elimination of official certificates (RDEC, 1997*). Subsequently, in the *Action plan for E-government: 2001-2004*, the authorities drew up ten specific practical and assessable indicators on three themes: (1) Internet readiness in the agencies, (2) the Internet capability of government employees and (3) information application and development.

1) Internet Readiness of Agencies: LAN installations, Internet connections and website installations.

2) Internet Capability of Government Employees: email users and browser users.
3) Information Application and Development: electronic official document exchange, online services (application form and online application), the elimination of the residential registration certificate, the elimination of the land registration certificate and GroupWare applications (RDEC, 2001*).

In essence, the government's assessment of e-government performance is centred on the quantity of the information infrastructure and of the distribution of official documents between government agencies. This is based on the delivery of services and the internal workings of government, quite apart from the public demand for and use of e-government. With the international trend moving towards joined-up government, the Taiwanese government set up a government portal site which was integrated with the *Integrated E-government Entry Point for Taiwan*. In this project, the authorities were interested only in the use of online service items. The six quantitative indicators were: numbers of people paying one visit per month; the number of registered users; the percentage of agency webpage retrievals using the portal search engine; the use of search engine elements at government agencies; the use of various types of application for directory services; and the integration of agency news and activity webpage information (RDEC, 2003d*). Although a few interactive features had already appeared on the portal site at the time, they were not
included in the assessment.

From the e-Taiwan project (2002-2007), the government’s ambition appears to have grown. E-government, along with e-industry, e-society and e-infrastructure, has become one of the four indices of the ‘e-Competitiveness’ framework. The framework aims to evaluate the overall performance of an information-driven nation. The concept and the following assessment of e-government are similar to those developed by the World Economic Forum and the United Nations. However, in their assessment the authorities in Taiwan pay particular attention to the capacity of the government. The Internet readiness of the agencies and government criteria are the nexus.

1) The Internet readiness of agencies is measured by its website installations and broadband connections.

2) The Government criteria are the number of online government services, level of public use of the portal site, public satisfaction with the portal site, public satisfaction with online information and transactional security, public satisfaction with the updating of online government information, public satisfaction with the government’s promotion of ICTs and searching of a government electronic
procurement system (National Information and Communications Initiative Committee, 2002*).

The Taiwanese government continually evaluates the readiness of its Internet infrastructure, but has recently added to the broadband installation. The demand for broadband reflects the updating of information infrastructure. Although the project took public satisfaction into account, the indicators were seen from the viewpoint of the government's needs. The indicators remain within the range of online service delivery and other relevant activities. There is no indicator related to the evaluation of interaction with or responsiveness from the government.

If there are no balanced quantitative and qualitative indicators or adequate methods of comparative data, the assessments of e-government are biased in specific aspects and inclined to serve only specific groups. In general, the Taiwanese government first prefers to design the quantitative indicators and substantially adopts quantitative methods. Second, the content of the assessments customises the government's requirements and its use of e-government. The government tends to focus on the evaluation of the information infrastructure, especially the Intranet, and the use of agencies and individual government employees. Although some data about public
need and the use of e-government are available elsewhere, the government’s assessments of e-government do not refer to this. Third, the measures are limited to service items only. Moreover, several items on the basis of two-way communication are excluded in their evaluation.

According to the OECD, many international benchmarking and existing statistical surveys about e-government are inclined to look at those aspects of it which are easier to run, such as the percentage of services online or the use of e-government services (OECD, 2003a: 138). The institutional assessments of e-government in Taiwan have substantially replicated this tendency; hence, the fundamental aspects and qualitative indicators of e-government have not been paid adequate attention. In addition, comparable quantitative data has not effectively been brought in. As a consequence, in this study, I want to focus on fundamental aspects, qualitative methods and some data which have been disregarded.

1.6.3. Analytical Framework of the Research

In any discussion on the impact of an innovation upon society as a whole, it is clear that social and political choices shape the use of innovation. The choices and the use made of them are far more complicated than merely the presence of innovative
hardware and software. An innovation cannot be examined in a vacuum. It is rather a
process and it builds a dialectic relationship between the users and the environment.

Whether the elements of e-government tend to underpin or undermine democracy
remains an open question, but it is certain that the potential of e-government depends
on the way that the technology is employed.

People, the institutional arrangements and the policies in particular settings have
played important roles in the development of e-government. The government
promises when listing the benefits of e-government that the facility would allow
more efficient service delivery, greater transparency in government information and
wider public participation in the process of decision-making. The designs, the uses
and public perception can encourage participation in the process, so as to support the
government's ultimate claim of furthering democracy. Indeed, according to Raab et
al, even potential abuses can be avoided by timely and appropriate public policies so
long as the public is continuously aware of the importance of democratic processes

Civic participation related to democracy is the ultimate claim of e-government. It is
rooted in public awareness. Public awareness of democracy is an important condition
for introducing e-government into politics. This originates from the idea of cognition, mainly concentrated at the individual level. Cognitive-based antecedents and the reinforcement afterwards of the perception of democracy determine civic participation from the members of a society. The government can raise public awareness via the institutional arrangements in the political and social systems.

Although Mannheim believes that the values resulting from democracy can be propagated widely through 'the co-ordination of institutions, education and psychology' (Mannheim, 1943: xviii), education itself has been conscripted into the suppression of awareness, especially the kind often referred to as 'ideological' thinking. Therefore, Mannheim regards the problems in the process of democratisation in terms of both the perception of the condition of society and the responses to these perceptions (Mannheim, 1936: 6). Education is the antecedent resource to inspire people to take part in political activities. Civic education, in particular, can influence both people's abilities (skills) and their motivation (interest) in the process of political socialisation (Norris, 2000: 214). Compared with other agents of this kind of socialisation, it is believed that the school is one of the systematic and important venues for imparting political education in society. An understanding of democracy is thus part of political education, which is often
referred to as education for citizenship. Civic education means, among other things, 'provision for enlightenment and for change' (Whitty, 1978: 7).

Mass education has been one of the great achievements of modern societies, interlinked with industrialization and the creation of the democratic nation-state (OECD, 1998). Literacy and education are regarded as crucial in preparing people for the development of the information society, as noted in the Networked Readiness Index by the World Economic Forum. Literacy by means of education contributes to the development of human capital for 'e-government readiness' and is taken as an index by the United Nations. However, this body is concerned only with overall literacy levels or specifically with IT literacy when it discusses e-government. If the e-government is devised to improve democracy and further contribute to democratisation, as many optimists hope, the fundamental values of e-government must be based on people's civic literacy gained via their civic education. In a series of reports, 'Eight Imperatives for Leaders in a Networked World', the Harvard Policy Group on Networked-Enabled Services and Government, based at the John F. Kennedy School of Government at Harvard University, suggests several guidelines in their report, Prepare for Digital Democracy. The first guideline is to strengthen civic education and other ways of nurturing democratic values (The Harvard Policy Group,
2002: 5). Therefore, first of all, it is necessary to discuss the public awareness of democracy through learning in schools before discussing in any depth the employment of e-government to strengthen democracy on the part of government and the public.

Democracy is a form of government over which the people exercise control and which operates in the people's interest. However, the understanding of democracy is relevant to the institutions of government. They are the resources through which citizenship can be made real, guaranteed and reproduced (Grugel, 2002:7). Ideally, the state should provide the framework which allows daily lives to be lived out democratically. The government can inculcate democratic knowledge in people through civic education. However, what opportunities are there nowadays for people to practise democracy? In theory, e-government is devised in the interests of practising democracy. The changed relationship between the government and the public which this produces is an important part of the process of practising democracy via e-government. In my investigation of the substantive content of e-government, I plan first to examine the work of the government in this regard, and then the work of the public. As Gupta and Jana indicate, policies and people play the primary roles in making e-government a success (Gupta and Jana, 2003: 365). In this
study, three themes are discussed, namely: the policy initiatives, the public use and
the public understanding of e-government.

In terms of the policy initiatives, e-government is a new means of political
communication between the government and the public. As democratic governments
showcase e-government, they presume that the interaction between them and the
public will move in a more positive direction through e-government. They actively
engage in developing policies and rolling out e-government initiatives, as well as
coordinating existing initiatives, in order to maximise the effects of e-government.
Therefore, evaluating e-government initiatives at the national level can identify the
government’s priorities, their willingness to be of service, their commitment to the
public good, their approach in governance, their strategies and also the planning and
implementation process of e-government (OECD, 2003a: 68-72). This is one of the
enabling factors of NRI and also key evidence of the readiness for e-government in
the developing world (Pacific Council on International Policy, 2002: 11).

In terms of the public use of e-government, beyond the development of policy
initiatives, it is important to examine how the public uses and what it feels about this
facility. The manner in which citizens evaluate e-government is in the long term one
factor in its impact upon democracy. As e-government policies mature, the focus of attention has tended to shift from simply providing access to services in an electronic form to actively managing the take-up and use of these facilities by the public. Public use and acceptance can be regarded as the input which makes e-government initiatives feasible and ensures the continuity of policies. This input is communicated to the policy makers, who in turn use the information to contribute to the development of e-government. Furthermore, the public use of e-government has the potential in some respects to reshape underlying views about government (West, 2004: 24). Therefore, public use stands for more than the pattern of use alone. It may reflect the level of public acceptance of all innovation. The public attitude behind acceptance can act as a reference and feedback to the government in the process of its decision-making.

In terms of the public understanding of e-government, 'e-government is a largely amorphous concept of varying meaning for different people' (Seifert and Relyea, 2004: 8). The government of course has its own interpretation, which is largely manifested in its policy initiatives. In order to create e-government services to meet people's needs, as the OECD suggests, the assessments of e-government should examine citizens' needs and their 'capacity to find, digest and use relevant
information’ (OECD, 2003b: 5). The level of public use does not sufficiently capture the quality of the use, if it is only interpreted in terms of behaviour according to statistics. Public choices to access certain websites and use certain services rely on what they conceive as their value. For example, Jaeger and Thompson say that information poverty explains why certain groups to have only a limited use for e-government (Jaeger and Thompson, 2004: 102). Therefore, the public use and public understanding of e-government must be inter-related.

Understanding and use have reciprocal effects. It should be noted that the links between the public use and public understanding of e-government are not sequential and direct but complex and highly interdependent. Understanding may be an antecedent reason to the use of e-government, but proper understanding may certainly reinforce the use of e-government. Undoubtedly, the level of people’s understanding of e-government has also influenced public acceptance of e-government as an innovation and meanwhile shaped public attitudes to the government. Therefore, public use and public understanding are two related perspectives on assessing citizens’ demands and the quality of e-government services. The primary effect can be shown in the modification of e-government initiatives, whereas the secondary effect can be the embodied changes in public confidence and
trust of the government as a whole.

There is a tendency to integrate the features of administration and democracy in the approach of e-government. The fundamental democratic values underline that it is particularly important for different parts of the political system. The subsections of civil education, policy initiatives, public use and public understanding of e-government depend to some extent on a good relationship between the government and the public. In these sub-areas, democratic values can be educated, examined and practised through such reciprocity. Therefore, in order to analyse the underlying need for the development of e-government and its impact on society, I plan to provide a framework, comprising the following four subsections, as shown in Figure 1.1 below.

Figure 1.1 Analytical Framework of the Research
1.6.4. Research Methodology

1.6.4.1. Choice of Methodological Approach

In essence, this study takes a qualitative approach, stressing the socially constructed nature of e-government. It is believed that qualitative research is a situated activity which locates the observer in the world (Denzin and Lincoln, 2000: 3). Qualitative research means different things at different times to different people. Qualitative researchers turn the world into a series of representations and material practices. At this level, qualitative research involves an interpretive and naturalistic approach to the world. According to Bouma and Atkinson, the characteristics of qualitative research include: a longitudinal element; and empathy with the people being studied (Bouma and Atkinson, 1995: 207). Qualitative research seeks to uncover, in particular, the intricate details of people’s everyday lives, including the complex of attitudes, behaviours, relationships and meaning-making within the specific conditions of their culture (Lewis, 2002: 261). In this study, the adoption of a qualitative approach reflects the importance of such focal issues as the development, context and impact of the subject under review upon people.

According to the OECD, as efforts to evaluate e-government become more advanced, there may be a greater reliance on qualitative measures (OECD, 2003b: 136).
Nowadays, however, research into the use of e-government is still dominated by a quantitative approach. The report of the World Economic Forum indicates that most standards of network use in many countries around the world strictly measure the level of use and focus on the rates of ICT diffusion or numbers of users as the most important elements of the networked world (Kirkman et al, 2002: 25). But, in its focus on public participation, the United Nations believes that a qualitative assessment is helpful for illustrating differences in strategies and approaches, in illuminating nuances in seemingly objective or quantitative results (United Nations, 2003: 110, 2004: 166). As mentioned earlier, the Taiwanese government has in the past been too reliant upon the quantitative approach in assessing the performance of e-government. Therefore, I plan to take a different approach from that used by the Taiwanese government. In this study, the discussion on civic education and e-government initiatives provides a historical and social context. The discussion on the public use and public understanding of e-government, including people’s experiences, feelings, awareness and willingness, can be useful reference in assessing people’s views of the ‘quality’ of information and services provided through e-government initiatives.
1.6.4.2. Research Methods of Collection and Analysis

There is frequently a commitment to using more than one interpretive practice in any study (Denzin and Lincoln, 2000: 5). In this study, the research methods deployed are as follows: documentary analysis, secondary analysis, content analysis and interview. Most of the data derive from more than one method. The sources are varied. Meanwhile, the data are cross-referred and the analysis is presented in different sections.

Documentary analysis has been extensively deployed in discussing the development of civic education and e-government initiatives. The content includes many government documents, policies and projects over an extended period of time and generates a trend. Lindlof indicates that 'it is wise for the researcher to ask for such access (various sources of documents) in stages...beginning with the most essential materials' (Lindlof, 1995: 115).

Documentary analysis normally does not draw upon firsthand data, or, rather it, relies heavily on secondhand data. Sometimes, these data are composed of the results from original surveys carried out earlier by other people in the archives. This is often referred to as secondary analysis. To use it is cheaper and faster than doing original
surveys; most importantly, 'you may benefit from the work of topflight professionals' (Babbie, 1995: 276). Those statistics provide enormous amounts of information and accordingly enable us to understand the dynamics of society as well as charting trends within society. In the section on civic education, I particularly address the concept of democracy. The mission statements of the national curriculum over a few decades are the texts for analysing how the government has interpreted the concept and instilled it into young people. The concept of democracy presented in the textbooks of civic education is further analysed. I draw on many previous quantitative studies for the materials of my secondary analysis. The methods of documentary analysis and secondary analysis overlap.

Moreover, official statistics are often used for secondary analysis, which may be defined as follows: 'further analysis of an existing data set which presents interpretation and conclusions of knowledge additional to, or different from, those presented in the first report on the inquiry as a whole and its main results' (Hakim, 1982: 1)

Official statistics, however, should be treated with caution, since they are often merely facts and figures used to provide power for social construction. It is necessary
to refer to and compare different data rather than rely on a single source. According to Clift, there are many surveys available in analysing citizens' activities with e-government, including usability studies, basic website user log analysis, advanced statistical generation (generating log records of click-out links from a main government portal to another government website) and focus group meetings organized for users, based on their frequent use of an online service (Clift, 2004). Therefore, in the discussion on the public use of e-government in Taiwan, I drew upon statistics from many surveys, such as themes from log analysis, measurements of satisfaction, reach rate and activities, from the national statistical archives, reports from independent organizations and scholarly research.

Content analysis is often used in the social sciences on the subject of communication content. In general, content analysis can be defined as any research technique for the 'objective, systematic and quantitative description of the manifest content of communications' (Berelson, 1952: 74) or for making inferences by objectively and systematically identifying the specified characteristics of messages (Holsti, 1969: 14). It is used to determine the presence of certain key words, concepts, themes, phrases, characters, or sentences within texts or sets of texts and to quantify this presence in an objective manner. Moreover, as Weber (1990) indicates, content analysis is a
useful technique for allowing us to discover and describe the focus of individual, group, institutional or social attention. In this study, in essence, civic education and public consultation in the context of e-government form a process of communication between government and people, using an instrument which is no longer traditional.

When the theme refers to public consultation about e-government, one online discourse and two sets of minutes of focus meetings between 2002 and 2003 are the materials for the content analysis. In the online discourse, four categories were created for coding: design, use, evaluation and other. Clift (2004) suggests a focus group meeting as one opportunity to discover citizens’ responses to the issue of e-government. Focus groups are particularly useful when there are power differences between the participants and the decision-makers or professionals, when the everyday use of language and culture of particular groups is of interest and when one wants to explore the degree of consensus on a given topic. The text of the minutes is significant due to their setting, which reflects the characteristic of the focus group to some extent. Although I did not conduct nor attend either focus group, the minutes from these two focus group meetings are useful for distinguishing citizens’ views from the government’s view and for this reason I chose these two sets of minutes as the content for analysis. Three themes are stressed, namely, content, adoption and
Interviewing is used widely to supplement and extend our knowledge about people’s individual thoughts, feelings, behaviours and specialized role relations (Fontana and Frey, 2000: 64). This study is based on the collection and analysis of mostly secondary sources but a few primary ones. In this study, interviews are a primary source but are used to supplement the methods shown above.

In the exploratory process of data collection, I interviewed, in an unstructured style, some of the people who have had experience of using e-government. I also interviewed, in a semi-structured style, several scholars from different disciplines in Taiwan who have some knowledge of e-government. These scholars come from the fields of media management, marketing and business administration, computing science and sociology. Exploratory interviews were useful for obtaining personal experiences, albeit of a limited kind, and identify the key issues of e-government in Taiwan at the time. I mainly used these data to contrast with the secondary data which I have collected and for refining my research focus. Furthermore, although the government articulated the benefits of e-government in the government policy documents, I treated such claims with caution. I thus approached the policy makers
to clarify issues arising out of these sometimes specious writings and obtain firsthand information. As a consequence, I interviewed a few senior officials in the e-government authority, including two associate research fellows, the director of the Department of Information Management and the deputy chairman of the Council for Economic Planning and Development, who had led relevant initiatives in the past. In addition, the government portal has since been outsourced to a private company, Digital United Inc. In order to understand the implementation of the portal and its coordination with e-government authority, I interviewed the project manager. Some time later, I interviewed the project manager again in order to understand the circumstances, the procedure of online discourse and I incidentally obtained some internal data. Finally, since I was not able to attend the two focus group meetings which were analysed, I interviewed a few people who participated in the meetings in order to reconfirm the validity, the procedure and the atmosphere at the time.

1.7. Research Outline

This study is divided into six chapters. Each chapter includes conceptual discussion and empirical analysis. Chapter 2 discusses the extent to which the Taiwanese conceive of democracy through their school education. The chapter focuses on civic education and takes a historical look at the change in the national curriculum and the
textbooks by which the subject is taught in the compulsory education system in Taiwan. However, a number of democratic values in Taiwan must be treated within the context of Confucian traditions and attitudes to politics. It is interesting to explore how the Taiwanese people understand ‘democracy’ through their civic education. In particular, Taiwan itself has been through different phrases of learning about democracy between the regimes originating in China prior to 1949 and those which began in Taiwan. What the Taiwanese people have learned about democracy is embodied in the country’s political and social changes.

In essence, e-government is an import from the West. The content of the Taiwanese people’s understanding of e-government is not as simple as the issue of IT literacy. Political literacy is the fundamental issue in understanding e-government. Democracy depends on people’s will to both define and support the public interest. The knowledge which people absorb about democracy as children influences the way in which they practise democracy via e-government, including their initial contact and the subsequent reinforcement of use. Therefore, it is necessary to discuss the public awareness of democracy through civic education in schools before any substantive discussion on the way in which the government and the public have employed e-government in the interests of democracy.
I spend the three chapters (Chapters 3-5) on mapping out the empirical case of e-government in Taiwan. I start by looking at it from the institutional perspective (Chapter 3) and then turn to the people's perspective (Chapters 4 and 5). Chapter 3 adopts the government's perspective, in which I discuss the policy initiatives concerning e-government. As regards the people's perspective, Chapter 4 tackles the theme of the public use of e-government, while Chapter 5 moves to discuss the public understanding of e-government.

Over the past few years, not only has the Internet environment matured but the political environment in Taiwan has faced unprecedented change in the ruling party. The policy initiatives have showed different characteristics at different periods. Every stage in the design and implementation of e-government involves the actors' choices of innovation, which leads to different implications for society as a whole. Chapter 3 is an interpretive investigation of how the Taiwanese government initiated, developed and managed projects to establish a presence as an Internet-based government. I shall trace the development of e-government initiatives in Taiwan.

In Chapter 4, I turn to the use of e-government in terms of citizens. The chapter focuses on the needs of Taiwanese users, especially of citizens at all levels, and
examines their participation in social and political life through the use of
e-government. However, the users' activities and their patterns of use in
e-government may not adequately reflect their demands for e-government. As a
result, further details are required. Chapter 5 provides an alternative perspective from
citizens, which addresses the public understanding of e-government. The chapter
discusses the capacity of lay people who have a significant interest in e-government
issues to engage in settings of communal deliberation and see the dialogue and the
interaction between these 'interested and active members of the public' and the
policy makers of e-government in Taiwan.

The last chapter of this study, Chapter 6, summarises the key findings from the
previous chapters and draws some conclusions about the development of
e-government and the impact which it has made upon Taiwanese society and
democracy. The limitations of this study and recommendations for future work are
identified in the light of the existing literature.
CHAPTER 2
STUDYING DEMOCRACY:
CIVIC EDUCATION FOR DEMOCRACY

2.1. Introduction

Barber says that 'democracy cannot be gifted to an unwilling people or imported to a culture not ready for it' (Barber, 2003: 172). Neither can it be willed or nurtured in a culture which is ignorant of its values. People's attitudes toward democracy, in fact, proceed from values which are culturally embedded and socially received (Almond and Verba, 1963; 1980). Hence, many people believe that political culture does not arise spontaneously. Rather, it is the process by which individuals acquire political beliefs and values through learning and social experience. This belief is driven by political socialisation, which means the development of cognitions, attitudes and behaviours relating to people's political environment (Sigel, 1965; Easton and Dennis, 1969; Hess and Tornet, 1967; Atkin and Gantz, 1978). The course of political socialisation is applicable not only to one's initial socialisation, but also to the processes of shaping one's political culture.
The meaning of democracy is now understood as more than the introduction of procedures for changing government institutions. A nation’s way of living following democratic values also constitutes democracy. Hence, an understanding of democracy is inseparable from the notion of citizenship, as Perry and Katula state (2001: 330). A broad understanding of how citizenship emerges and changes over time provides useful insight into the ways by which the meaning of democracy can be transmitted and reinforced and by which a democratic culture can be reproduced and enriched. The public understanding of democracy in political socialisation can thus work only through adequate institutional arrangements. For example, there is a growing scholarly literature which argues that civic education plays a decisive role in influencing individual political participation, civic competence and support for democratic values in the world’s developing democracies (Morduchowicz et al, 1996; Finkel, 2002; 2003).

In the world map of democracies, Taiwan has drawn the attention of the Western world as a ‘young’ democratic country, in terms of the institutional changes and elections. According to Grugel, nevertheless, in their democratisation a considerable number of countries, including Taiwan and others, have largely ignored the recognition of substantive democracy, resting on citizenship and participation. As a
result, the question arises of how people in Taiwan understand 'democracy'. As Finkel points out, 'the investigation of civic education’s impact can shed light on important issues in the study of political culture and democratic consolidation’ (Finkel, 2003: 138). However, civic education cannot stand by itself, independent of cultural norms, geopolitical contexts and historical antecedents. The extent to which and the ways in which the Taiwanese conceive of democracy is inevitably associated with the context of Confucian traditions and politics.

Moreover, there are many forms of mediated communication in shaping political culture. School is regarded as one of the most likely potential agencies for political socialisation. Hess and Torney (1967), for instance, single out the school as the central, salient and dominant force. Ideally, civic education in schools can contribute to the stability of society by preparing young people to be informed and active citizens. In particular, formal civic instruction can make a difference in the acquisition of democratic attitudes, skills and knowledge among the students (Patrick, 1972; Vontz et al, 2000). Therefore, a further question may be asked: How is democracy interpreted through the civic education in school of unformed, impressionable and susceptible young people in Taiwan?
This chapter, then, seeks to focus on civic education in schools and takes a historical look at the changes in the national curriculum and the textbooks by which the concept of 'democracy' is taught in the compulsory education system in Taiwan. The chapter is divided into several sections: I firstly go back to the content of Confucianism, reviewing the relationship between Confucianism and democracy within Chinese culture. Secondly, I briefly look at the development of civic education from the time when the republic was founded in the early twentieth century until the split of modern China into two contrasting political regimes in 1949. Thirdly, I concentrate on the dynamic of civic education in Taiwan, in which I first review the national curriculum in its social and political context, followed by an examination of the interpretations of democracy in the textbooks for civic education. Drawing on these materials, I go on to discuss civic education in Taiwan as a whole. Finally, I conclude that, although civic education no longer acts nowadays as a propaganda machine, it needs to construct modern values, not least a democratic literacy to support the democratic systems.

2.2. Confucian Traditions and Democracy

From his long-term observation, Lucian Pye identifies some of the distinct cultural and psychological patterns in Asia, such as deference, respect, social harmony,
bureaucracy and order, which shape its political practices and social relationships (Pye, 1966; Pye and Pye, 1985). These values are recognised as part of the Confucian legacy. Chinese societies over the past thousand years have been heavily influenced by Confucianism, as represented by the thought of Confucius and Mencius. Confucian philosophy consists of a code of ethics and a standard of conduct developed to guide relationships between people (Han, 1984: 104-106). It puts great emphasis on the duties arising from social roles, especially in what are considered the five basic human relationships (father-son, husband-wife, elder brother-younger brother, ruler-ruled and friend-friend); and on the virtues of respect for the elderly and filial piety, shown in the mutual trust and care between family members. Thus, the former reflects the characteristic of hierarchy within Chinese culture, while the latter covers the working of interaction aimed at social harmony.

In politics, Confucianism elaborated the art of governance for the rulers and portrayed an ideal world for the people. Mencius, for example, addressed to governors a classic statement about the craft of governance: the people are the priority, the state-government is next and the subject of least importance is the emperor. As regards the Chinese emperor, however, Mencius thought that making people the priority was merely the skill of getting 'close to the people' rather than an
attempt to share rights and responsibilities with them. Confucianism holds that a wise
and able governor is what is needed. The people always expected that this kind of
emperor would rule their lives, but, if not, they could take the step of revolution as a
way of overthrowing a tyrannical regime. This is evident in every turn of the
dynasties which succeeded one another throughout Chinese history.

Confucianism views the government as an extended family, which makes
paternalism an important component (Lu and Hung, 1999). The concept of respect
for seniority within the family is also extended to the government. Therefore, the
maintenance of order and respect for the hierarchy are central values, with the result,
as Huntington indicates, that 'Confucian societies lacked a tradition of rights against
the state' (Huntington, 1991; cited by Fukuyama, 1995a: 24). Such traditions
basically assume that people are passive and they are prone to rely on authority to
establish the system, which consequently grants legitimacy to the governor's
authority so long as he is competent. Some people believe that this influence has
given rise to the concept of 'Confucian democracy', a system in which individual
rights did exist, but only so long as they were created by the state. This concept was
meant to meet Western criticisms of 'soft' authoritarianism in Huntington's terms
Moreover, predictably, Confucianism has always seemed to flourish best under autocracy. The powerful governor, given charisma and a strong personality, can easily dominate any regime in an Asian society influenced by Confucianism. Even in the twentieth century, the political leaders in Taiwan (e.g., Chiang Kai-shek and Chiang Ching-kuo) and Singapore (e.g., Lee Kuan-yew) ran their countries in an authoritarian way. Although some of them declared themselves democracies, 'Confucian democracy' contradicts what democracy means to the West (Huntington, 1991). Some important democratic values, such as equality, individual freedom, human rights and the rule of law, which are widely accepted as indispensable conditions for democratic consolidation, are neglected (Scalapino, 1995; Shin and Shyu, 1997). Therefore, for Huntington, Confucian or Confucian-influenced societies are inhospitable to democracy.

However, Fukuyama holds a somewhat optimistic attitude with regard to Confucianism and democracy. Given that the most reliable means of generating
wealth and achieving material prosperity is possibly the precondition, as well as forming the required processes, for democratisation, Fukuyama believes that:

‘There is no fundamental cultural obstacle to the democratization of contemporary Confucian societies and there is some reason to believe that these societies will move in the direction of greater political liberalization as they grow wealthier’ (Fukuyama, 1995a: 32).

Much of the discourse about so-called ‘Asian values’ in the 1990s, however, offered alternative views. The most prominent advocacy of ‘Asian values’ drew on the success of the economy, especially in relation to the ‘tiger economies’. Many of the most eloquent voices in this discourse originated in Lee Kuan-yew’s regime in Singapore and peaked not long before the East Asian financial crisis in the final years of the century. A list of its core values includes: stress on the community rather than the individual, giving priority to order and harmony over personal freedom, a particular emphasis on saving and thriftiness, an insistence on hard work, a respect for political leadership, a belief that government and business need not necessarily be natural adversaries and an emphasis on family loyalty (Sopiee, 1995: 185-193;
Milner, 1999:57). Basically, these values reassert some of the features with which Confucianism is familiar.

Those hostile to the ‘Asian values’ question their universality. Lawson (1995) frankly accuses the regimes which follow ‘Asian values’ of wanting to cloak their autocratic strategies and methods in arguments of cultural exceptionalism. The proposal of ‘Asian values’ looks like new wine in an old bottle, which is brought in to legitimise some specific ruler. Referring to the economy, the foundation of ‘Asian values’, Robinson (1996) indicates that it is an ideology combining organic statism with a market economy. Ironically, in Taiwan, which is assumed to be influenced by both ‘Asian values’ and Confucianism, the former President Lee Teng-hui, whose presidency was from 1988 to 2000, disapproved of ‘Asian values’ and was instead one of the powerful advocates of ‘universal’ liberal values in Asia.

When the far-reaching Asian financial crisis occurred in 1997-1998, the collapse of the ‘economic miracle’ was a timely check on the advocacy of ‘Asian values’. If this debacle represents the end of such advocacy, as most people believe, does it prove that ‘Asian values’ were nonsense? It is fair to say, to begin with, that ‘Asian values’

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could not offer a sufficient explanation for the ‘economic miracle’. When the market collapsed, Taiwan, fortunately, escaped almost all the adverse effects. But was Taiwan merely a lucky exception? Or was it because the ‘Asian values’ were not so widely applicable to the Taiwanese case? Like Singapore, Taiwan is also typical of East Asian countries in its Confucianism. The striking difference between it and the others was that Taiwan according to the Freedom House Report, began in 1996 to move from a semi-free to a totally free democratic polity.

It would be naive and inappropriate to assert from this evidence that democracy is better than authoritarianism in a financial crisis, as shown by the cases of Taiwan and Singapore. After all, both of them for centuries had lived under Confucian traditions. Therefore, neither ‘Asian values’ nor Confucianism can explain the ‘economic miracle’. But the celebration of ‘Asian values’ offers to many Asian countries an opportunity for self-examination and a chance to look into their cultural origins. Consequently, understanding the influence of Confucianism or the extent of ‘Asian values’ cannot be separated from the context of politics over time, which is always associated with the socioeconomic structure.
Do the Confucian traditions absolutely contradict democracy? Or can the two be reconciled? An understanding of democracy may offer some clues. Among Chinese Confucian societies, Taiwan has played a leading role in the process of democratisation from an authoritarian state to a democratic polity. Taiwan has thus a unique history of learning democracy. The story begins from the civic education in China in the late nineteenth and early twentieth centuries.

2.3. The Early Stages of Learning Democracy in the Twentieth Century

The Chinese culture which in principle confronted Western culture emerged from the wars of the nineteenth century. After the defeat by the West in the Opium War (1839-1842), Chinese intellectuals began to reconsider their own culture and values in an effort to learn from the West, ushering in the modernisation of the twentieth century. As Jacobs (1971) indicates, modernisation without a democratic structure cannot make progress. The revolution of 1911 led by Dr. Sun Yat-sen overthrew the monarchy and established the so-called Republic of China. In the May 4th Movement of 1919, Chinese intellectuals appealed for the introduction of 'science' and 'democracy' from the West into China. Many believed that science and democracy
went hand in hand and were inherently linked (Spence, 1990). They never totally
gave up their original Chinese values, however. Rather, they initiated the idea that
‘the body consists of Chinese values, but its usefulness is activated by Western
intelligence’. ‘They equated democracy with scientific rationality and believed that
individual Western values could be isolated and selectively grafted onto the
indigenous political process’ (Kong, 1997). To some extent, traditional Confucianism
has been reconstructed and is now applied in a hybrid way.

The tenets of Confucianism, which stress the development of the whole person, have
deeply influenced the value system of civic education and at first reflected its goals
and content at the beginning of the twentieth century. In its early days, this civic
education taught people self-discipline and a regard for the cultivation of their moral
character. Civic education was almost a synonym for moral education. The emphasis
reflected the core values of Confucianism, which had endured in the feudal society of
China for a millennium: concern for others, right behaviour, honouring seniority and
ruling with moral probity and benevolence. The self-cultivation of the individual can
extend to the hierarchy of both the family and the state. It is believed that
fundamental moral culture is the root of the ideal system of Confucianism, which
calls people to cultivate themselves first, then to regulate their family and eventually
to reach a harmonious world, according to another Confucian classic, *Great Learning*,
by the philosopher Zeng Zi.

Apart from its Confucian legacies, Sun Yat-sen's best-known work of political
philosophy, *Three Principles of the People*, has had a profound influence upon
modern Chinese societies and the teachings of civic education. In his *Methods and
Strategies of Establishing the Country*, completed in 1919, the corruption and
degeneration of the feudal system impelled Sun to suggest the doctrine set out in the
*Three Principles of the People*, to establish ultimate peace, freedom, democracy,
equality and welfare in the new republic. Sun's ideology was to some extent
influenced by his experiences in the United States, the American progressive
movement and the ideals championed by Abraham Lincoln. However, Sun claims
that his doctrines sought to represent a reconciliation between traditional Chinese
virtues and Western rationality.

*Three Principles of the People*, collectively translated as the *Sun-min Doctrine*,
consisted of people's nationality, civic rights and the means of livelihood. These
principles were named 'The Principle of Minzu' (literally, *The People's
Relation/Connection*), 'The Principle of Minquan' (The People's Power) and 'The
Principle of Minsheng' (The People's Welfare/Livelihood). The first principle concerns the resurrection of nationalism, by which Sun means freedom from imperialist domination. It was the natural response of a patriotic Chinese to the international environment in which China then found itself. The counterpart in Lincoln's doctrine is 'Government of the People'. The second principle recognises the importance of democracy, which implies a Western constitutional government. This is very similar to Lincoln's 'Government by the People'. It should be noted, however, that Sun's ideal of governance is not the same as the Western ideal. Sun adopts the European-American constitutional theory of three-branch governance as the basis of the governmental structure. Making the system of checks and balances in the tradition of Chinese administration the basis of Western governance, Sun created the five powers of government, namely, the judicial, legislative, executive, examining and controlling, in his new republican system. As for the third principle, Sun describes how an ideal Chinese government can take care of its people in the areas of food, clothing, housing and transportation (Chi, 1992: 80-83). This corresponds with Lincoln's phrase 'Government for the People'.

Sun's ideology provided sufficient materials for civic education by his political successors. In 1929, civic education was wholly based on the teachings of the Three
Principles of the People. But later, in the 1930s, civic education and the Three Principles of the People became separate subjects in the national curriculum. However, to some degree, civic education was still heavily influenced by this work. Civic knowledge then consisted of the basic concepts of politics, dominated by the ideology of Sun's doctrines.

2.4. Dynamics of Civic Education in Taiwan

2.4.1. The National Curriculum in Context

The development of civic education in Taiwan was an integrated response to its socio-political transformation and economic needs. Economic and socio-political forces not only interact with each other but also tend to produce new tensions in the school curriculum. In 1949, the Chinese nationalist government of President Chiang Kai-shek fled to Taiwan ahead of the advance of Mao Ze-dong and the Communists. As a result, China formally split into two regimes, the People's Republic of China (known as Mainland China) and the Republic of China (known as Taiwan). After 1949, due to its long-term opposition to Mainland China, the Taiwanese government deliberately reinforced the ideology of anti-Communism and showed its hostility to Mainland China partly in its courses of civic education and the promulgation of the Three Principles of the People. Apparently, education has served as a powerful
means of propaganda. In implementing this education policy, the Taiwanese
government established a mechanism to transmit its officially supported value
systems and suppress any values which challenged its legitimacy.

In the 1950s and 1960s, the government’s primary concern was to counter any direct
and hidden threats to its legitimacy in Taiwan, while it hoped to reclaim control over
Mainland China. The political system was an autocracy, unanimously
anti-Communist. Civic education was given the task of continually indoctrinating
such political ideology. In 1952, the Ministry of Education put great emphasis on
civic education in the national curriculum, as a way to ‘foster decent citizenry and,
not least, stimulate the national consciousness’ (Ministry of Education, 1972: 355*).
The fundamental goals of the national curriculum standard of 1952 identified the
virtues, practices, conditions and ideals of decency. The four goals were:

First, to train students to follow traditional morality – four disciplines and eight
virtues;

Second, to give students a correct understanding of the nation, family, school
and society;

Third, to teach the essential understanding of what decent citizenry means;
Fourth, to encourage students to participate in civic affairs, to pledge loyalty to the nation and to maintain the vision of world peace (Ministry of Education, 1956: 25-31*).

National consensus was integral to nationalism and cannot be understood apart from its context. According to Chiu, the national consensus described in the national curriculum standard of 1952 was synonymous with the ideology of anti-Communism, the dogmatic object of political education (Chiu, 1998: 79*). The funding of Mao’s regime in Mainland China relied heavily on the Soviet Union, which represented the international support for its Communism. Moreover, because of its defeat by the forces of Mainland China, under the banner of Marx-Leninism, anything related to Mainland China became the first and only enemy for the Taiwanese authorities. Therefore, whoever supported Mao’s regime was a traitor to the Chinese of Taiwan. Anyone who challenged this supreme national policy had to be aligned with Communism. The people of Taiwan had to report such views to the authorities without hesitation (Lee, 2002: 105-107*). Meanwhile, martial law and the Temporary Provisions were announced in 1949, under which the constitutional protection of human rights was suspended and heavy restrictions were imposed on such things as public rallies, group activities and all forms of publication,
self-expression, the mass media and so on. In particular, the Temporary Provisions extended presidential power to an unlimited extent and created extra-constitutional institutions to perform emergency functions. Referring to civic education, the government’s goal was simplified down to educating students in patriotism and anti-Communism. The authorities also hailed the *Three Principles of the People* as the supreme code to compete with Communism, which was held to symbolise ultimate evil.

The national curriculum standard of 1962 showed ‘democracy’ for the first time as one of the four fundamental goals. The first three goals still followed those of 1952, but the fourth was amended as follows:

‘To stimulate citizens’ awareness, to develop democratic belief, to reinforce national consciousness and the concept of the nation, as well as achieving a harmonious world’ (Ministry of Education, 1962: 57-66*).

However, the premises for teaching citizenship still struggled to find a balance between ethical behaviour and the reinforcement of anti-Communist ideology. The word ‘democracy’ indicated in the goals of civic education looked like an ironic and
unrealistic slogan, since the coercive force and authoritarian atmosphere of the regime, dominated society and stifled individuality. Any anti-government voice was all too easily stigmatized as an advocacy of Communism, or even a spy working for Mainland China. Society was altogether under severe surveillance. Although democratic belief was indicated as part of the national curriculum, the Taiwanese authorities did not encourage the diffusion of democratic values in practice. Democracy thus became an empty word and was mainly used as an ideological symbol to counter Communism. The introduction of the idea of democracy, however, reflects the authorities’ anxiety to seek endorsement for its legitimacy in Taiwan. The authorities also wanted to prove that the system in effect in Taiwan, following the *Three Principles of the People*, was working, while in contrast the regime of Mainland China based on Communism had failed. The school curriculum, especially that for civic education, indoctrinated students into a belief that the adherence of Chinese leaders to communist ideas had led to desperate living conditions for people in Mainland China (Liu, 2004: 101).

In 1968, the compulsory education system was extended from 6 years of elementary school to a further 3 years in secondary school. Subsequently, civic education was taught under the rubric of ‘Standards of Behaviour and Ethics’ together with ‘Social
Studies' in elementary schools, stressing education for living. However, as the Ministry of Education (1968) outlined in its measures regarding 'subject and time' in the *Temporary National Curriculum for Elementary School*:

...the subject of 'Standards of Behaviour and Ethics' covers fundamental morality, civic knowledge, standards of behaviour and healthy habits. But in order to provide coherent education for 9 years, we particularly separate civic knowledge from this subject in elementary schools and teach it in secondary schools only (Ministry of Education, 1968*, cited by Wan, 2004*).

Secondary school thus became the main place for receiving education in citizenship in the classes called 'Civics and Morality'. Significantly, in the list of fundamental goals of the national curriculum for secondary schools in 1972, the term 'democracy' is retained. But the term 'to rule by law' is added, in accordance with democratic beliefs, to its four fundamental goals (Ministry of Education, 1972: 13-19*). In the process of indoctrination, however, the rule of law was much preferred to the exercise of human rights.
Outside school education, the practice of surveillance and its 'chilling effects' on society did not perceptibly diminish during the 1970s. The government strictly controlled the people in this highly politicized authoritarian system, which was based on martial law. However, the few radical, political and illegal magazines founded by some intellectuals and the few opposition candidates who won local elections were enough to change 'public opinion' gradually. In response to this pressure, the authorities conceded a limited amount of freedom to the people, including an increase in the numbers of national representatives and allowing wider registration for magazines. Despite this, any dissentient voices were often quickly eliminated by the authorities in the name of 'law and order'.

In the 1980s, when the national economy took off and the so-called 'economic miracle' took shape, the Taiwanese faced several immense changes in the political and social context. The socioeconomic structure was transformed from a predominantly rural and agrarian system into an urban and industrial society. Its economic performance, driven by modern science and technology, also created an educated and urban 'new middle class', from which emerged people who became a social force at the head of movements to deepen and reform democracy (Diamond et al, 1997: pxxxiii). These people became the leading actors in mobilising various
social groups at the time. As Chu observes, ‘the mobilisation loosened the authoritarian state’s grip on civil society at the grassroots level’ (Chu, 1996: 74). People were no longer satisfied with the highly centralized rule and self-sufficient localism of the past.

In order to adapt to social changes, the dimensions of the civic education available widened, ranging from education, democratic politics, legislation, the economy and society to culture. This was in the hope that young people would develop an understanding of their own nation, society and culture. Therefore, the national curriculum was neither deliberately concentrated on civilization, in terms of individual morality and conduct, nor on consolidating an anti-Communist ideology. However, the basis of civic knowledge was still closely connected to the spirit of the *Three Principles of the People* – ethics, democracy and science. In the national curriculum standard of 1983, the fundamental goals were once more identified:

First, to establish civic education on the basis of ethics, democracy and science and further to lay a foundation for the revivification of Chinese culture;
Second, to teach students to educate themselves, to get on in the world, to help each other in accordance with an ethical system, so that a modern citizenry can emerge with an adult morality and ways of behaviour.

Third, to stimulate self-awareness for students, to develop their understanding of democracy and the law, to promote national consciousness and maintain national esteem.

Fourth, to strengthen students' scientific understanding, to develop national competence in operating the economy, to diffuse Chinese culture and eventually achieve the vision of world peace (Ministry of Education, 1983: 33-39*).

However, the curriculum has never separated democracy from the law. As was the case with the national curriculum standard of 1972, that of 1983 again in its fundamental goals stressed the importance of democracy, followed by the law. However, in such an authoritarian context, the law was a repressive instrument of the ruling party. The introduction of the 'law' was more about the rule of the ruler than a genuine rule of law. This shows that the Taiwanese authorities retained some anxiety over democracy. As Chiu says, democracy and the law combined to form an ambiguous compound. The law was undoubtedly a part of democracy. The 'law', indeed, was deliberately emphasised along with 'democracy', which shows that the
authorities in this case intended the law to suppress democracy; hence, the law in Taiwan sometimes overrides democracy (Chiu, 1998: 80*).

Since the mid-1980s, Taiwan’s democratic scenario has gathered speed, albeit with some turmoil. Taiwan has made the transition from a ‘hard authoritarianism’ to a ‘soft authoritarianism’ (Wincker, 1984: 482). The government modified its political system by institutionalizing and legalizing opposition parties and introducing popular elections at the local and national levels. The first opposition political party, the Democratic Progress Party, was legalized in 1986. Since the lifting of martial law in 1987, Taiwan’s socio-political culture has substantially changed. 38 years of restrictions on public rallies, group activities and mass media were removed. Human rights were further secured, too. Significantly, the Taiwanese government has since 1987 officially allowed its citizens to visit Mainland China as tourists and to visit relatives, but some activities are still severely restricted. In 1991, the Temporary Provisions were abolished, following a sequence of reforms to the constitution. The three-stage series of constitutional revisions methodically eliminated most of the legal obstacles to the functioning of representative democracy. With different levels of elections under way, the opportunities for citizens’ participation dramatically
increased. Taiwan was now in a transition from an authoritarian state to a democratic polity.

The changing political situation inevitably influenced civic education and, therefore, in the 1990s the emphasis of education shifted from the transmission of political ideology to the acquisition of civic knowledge and civic virtues. Civic education also began to draw on pragmatic experience in relation to the world outside the school. The four fundamental goals were now identified as follows:

First, to inculcate moral principles, which would benefit students in their everyday lives.

Second, to teach a basic understanding of law and politics, in which students can study the concepts of democracy and the law, as well as being prepared to exercise their responsibilities and obligations as citizens.

Third, to strengthen perceptions with regard to society and the economy, which would show students their responsibility to society and the economy and help them to further engage in useful work.
Fourth, to promote a basic understanding of and interest in Chinese and international culture among students, with a respect for other cultures (Ministry of Education, 1994*).

The revised national curriculum standard of 1994 clearly had two aims: education for living and moral choices and education for democratic and civic life. According to the national curriculum of 1994, the subject of ‘Civics and Morality’ was to be taught only in the three years of secondary school. It was even condensed and taught only in grades 8 and 9, while the subject of ‘Understanding Taiwan’ was taught in grade 7. The revision of ‘Civics and Morality’ was organized into four themes across different disciplines and related to pragmatic experiences in the students’ lives: School and Society, Law and Politics, Economics and the National Culture. Twelve civic virtues were embedded in the curriculum: honesty, patriotism, obedience to the law, benevolence, filial piety, etiquette, industry and frugality, justice, public virtue, responsibility, cooperation and respect. Moreover, the subject of ‘Understanding Taiwan’ in the first year of secondary school aimed to offer a brief understanding of the students’ own nation, culture and society in the hope of strengthening the sense of national identity. This subject continued the course in ‘Native Place Teaching Activities’ from grades 3 to 6 in the elementary school. The subject of
‘Understanding Taiwan’ was divided into three themes: society, history and geography. Ten sub-themes included people and language, family and relatives, festivals and customs, historical sites and cultural crafts, education, economics, politics, leisure, religions and social issues.

Significantly, the new syllabus reduced the amount of overtly ideological content in the curriculum. Civic knowledge has gradually been integrated into civic life, while civic virtues have swung between authoritarianism and modern values. In the syllabus for Law and Politics, for instance, the content was divided into several topics, including the nation, the government, parties and interest groups, election and political participation, definitions of the law, citizens’ basic rights, responsibility and obligation in law and a basic knowledge of the law for adolescents. Such provision reflects the need for current affairs to be taught in schools. Since the 1990s, in response to the increasing demand for democracy, the government has made some efforts to reform of the political system. Despite this, the authorities were still taking a conservative attitude to democracy. This can be observed from the outline of the national curriculum, in which the absorption and practice of civic knowledge were described, but little attention was paid to democratic literacy for citizens. The course described the learning of civic knowledge, political systems, multi-cultural societies,
autonomy, morality and patriotism. However, it did not mention such dispositions of democracy as the tolerance of different opinions and respect for human rights, which should be covered in a course on democratic literacy.

The change of political systems, then, does not mean that democracy has arrived. Rather, the low level of democratic literacy, such as would apply to each citizen's habits, beliefs or even their perceptions of democracy, serves to maintain the political system as it was in the era of the Temporary Provision. In terms of political system, indeed, Taiwan before 1987 was a society with no prior experience of democracy, whose history had been one of imperial control, colonial administration and one-party authoritarian rule. Over several centuries, Taiwan was under the rule of China. However, Taiwan was also in the past colonized after invasions by both the Portuguese in 1624 and the Japanese in 1895. The history of colonisation ended in 1945, when Japan hauled down its flag at the end of the World War II. From 1949, Taiwan entered an era of one-party authoritarian rule under the Kuomintang (KMT) Party. Since 1987, however, despite the move to a more democratic regime, the right to govern and the right to oppose were not clarified. This ambiguity also applied to civic education. The new curriculum specification for civic education for young people certainly offers an overall understanding of the institutions of the state. They
learn about politics, economy and the workings of society, as well as learning how to build good relationships with others. Yet, they are not required to learn about participatory citizenship either directly or indirectly. In particular, since the social turmoil during the pursuit of democratisation in the 1990s is not expected to recur, the course of civic education concentrates on strengthening students’ knowledge of the law, instead of showing them ways to develop democratic skills through participation.

From the mid-1990s, educational policy-making encountered a ‘revolution’, which was closely associated with the political changes. The democratic movement culminated in the presidential election of March 1996, which is believed to have been the first direct election in Taiwanese history. Many scholars marked the election as ‘an important step on the road to democratic consolidation’ (Diamond and Plattner, 1997: xli; Higley et al, 1998: 148). The democratic atmosphere also spread to the reform of education, at roughly the same time. As Davis (1999) indicates, the democratisation of education can provide a useful framework for checking whether democracy is translated into, and reproduced through, education. A number of pressure groups have sprung up and consistently pushed the government to reform education policies, ranging from the national curriculum, the disciplines, the
pedagogy to the production of textbooks and so on. Taiwan’s education system has thus become more decentralized, flexible, diversified and autonomous than before. The most significant event was the partial decentralisation of the national curriculum, following a change in the control over textbooks and in the integration of different disciplines.

For forty years, the National Institute for Compilation and Translation, under the control of the Ministry of Education in Taiwan, monopolized the design, arrangement and publication of all textbooks for elementary and secondary schools. The Ministry of Education enforced the standards of the national curriculum in order to ensure the overall quality of schooling. The standards prescribed the goals, time allocations, scope and sequence and implementation guidelines for each subject. It should be also remembered that the only approved textbooks were those which, after commercial publication, were passed by the Ministry of Education. In 1997, however, the Ministry of Education announced that textbook production would be completely open to private enterprise and decided to completely abolish the role of the National Institute for Compilation and Translation. Hence, free market choice has been allowed to play a part in the provision of textbooks.
Subsequently, the government decided to break down interdisciplinary boundaries and integrated education for grades 1 to 9 into 7 coherent themed fields. In the *Nine-year Integrated Curriculum Plan for Elementary and Junior High Schools*, the separate subjects were replaced with an interdisciplinary approach. Civic education was not taught as an independent subject but was instead incorporated into ‘Social Studies’, along with ‘History’ and ‘Geography’. The subjects of ‘Understanding Taiwan’ and ‘Native Place Teaching Activities’ as previously instituted were now incorporated into ‘Social Studies’. In the meantime, the previous national curriculum standards were replaced by new national curriculum guidelines, which resulted in some education decisions being devolved to the schools themselves. This change implies a step toward school autonomy. For example, since then the teachers have had more freedom to choose appropriate materials. There has been a reallocation of power between teachers, principals and the education authorities. As a result, the government can no longer manipulate the diffusion of knowledge through setting its own standards for the national curriculum and textbooks. Education has become less dominated by the state and consequently more self-determined and more open to other social agencies. This new plan is regarded as a turning point for curriculum decentralisation (Liu, 2004: 103).
Not only the education system but also the political system in Taiwan turned the corner at this time. Its presidential election held in 2000 marked another milestone in the path toward democracy. The Kuomintang Party has now peacefully conceded power to what used to be the opposition party, the Democratic Progress Party (DPP). The result completely reversed over half a century of one-party dominance in Taiwan, which was recognised as a consolidated democracy by international society at the time. All of a sudden, the Taiwanese succumbed to democratic fever and embraced democracy as a universal value.

According to the *Temporary Outlines of the Coherent National Curriculum for Grades 1-9* published in 2000, there was an emphasis on the duties and commitments of citizens to the status quo. Democracy and the rule of law were reiterated as major goals of the curriculum. The task was:

'To foster democratic literacy and to teach the concepts of law and order for students, asking them to be responsible citizens' (Ministry of Education, 2000*).
Other goals were no longer concentrated on the development of personal morality, but rather identified various competences which in a modern citizen would have to be enhanced, such as critical thinking, international perspectives, knowledge of how society works, rationality, democratic participation and IT skills. The new national curriculum focuses on skills and the application of civic knowledge, while the essentials of civic knowledge seem now to be taken for granted. Has civic education in Taiwan cultivated a democratic culture? The people in Taiwan today, still to some extent under the influence of Confucianism, have not had as much practice in democratic literacy as the West has. Self-cultivation, as one of the central ideals emphasised in the Confucian past, was related to the development of moral dispositions and behaviours. But it is not promoted nowadays, let alone its application to civic behaviour. To develop the sort of democratic literacy which would be required for Taiwanese people today, civic education needs to reconsider the roots of the country's traditional culture and some way of adjusting the tensions between East and West.
2.4.2. The Content of Textbooks on Civic Education

Not only the national curriculum but also the available textbooks condition the knowledge which young people must absorb. The textbook plays a key role in the definition of curriculum content. Since the most popular resource of learning for students in schools is the textbook, the key components of the curriculum continue to embody a strong orientation towards curricular knowledge of a kind which is insulated, established and abstract (Morris and Chan, 1997: 254). Ideally, the textbooks on civic education should teach the principles of critical citizenship (Schwoch et al, 1992) and set models for active civic participation. However, the textbook is a production of institutionalised knowledge, which imparts an official ideology to young people through the education system. In accordance with the different revisions of the national curriculum in the past few decades, the textbooks on civic education in Taiwan have thus shifted the students' attention from political ideology to civic knowledge. The textbooks on civic education mainly present the subjects of ‘Civics and Morality’ and ‘Social Studies’ in the compulsory education system.

Before the 1980s, the teaching of democracy was more or less absent from the textbooks on civic education. This may have been because the idea of democracy
was at some time believed to threaten the authorities. The government was
preoccupied with reinforcing political ideology. The concept of democracy was
wrapped in a simplistic political ideology of anti-Communism and patriotism. In a
content analysis of the textbooks on the subjects of ‘Chinese’ and ‘Civics and
Morality’ for secondary schools between the 1950s and the 1980s, Yang (1994)
indicated three distinctive approaches: first, that a political ideology which
concentrated on inculcating the concepts of the citizen’s pledge to the nation and
obedience to the national leaders, was dominant; second, that traditional morality
was reinforced; third, that any understanding of modern society was substantially
neglected (Yang, 1994: 312*). Specifically, in the textbook of ‘Civics and Morality’,
the most popular theme was the pledge and the importance of loyalty and obedience
to President Chiang Kai-shek. Around 35 or 40 per cent of the total content took this
as its theme. The second popular theme concerned anti-Communism and reclaiming
power over Mainland China, while the least popular theme was democracy. Less
than 2 per cent of the total content in the textbooks of ‘Civics and Morality’ mention
topics linked to democracy. It was not until the 1980s that the themes of the pledge
and loyalty and obedience to the President Chiang Kai-shek dropped to 24.62 per
cent of the whole, followed by the themes of law and order, as well as rights and
responsibilities (20.77 per cent). The theme of democracy remained in the lowest
position, but its share increased a little, up to 4.62 per cent (ibid, 237, 246, 255, 265*).

Similarly, Leu discovered that little attention was paid in the textbooks to the interpretation of democracy and its related concepts, whereas its share was surrounded by the interpretations of nationalism and patriotism (Leu, 1981: 143*).

The figures above not only reflect the political tension between Taiwan and Mainland China which form their context, but also present the dominance of political ideology at the time. Civic education was conscripted to teach people a political ideology, rather than to serve their civic knowledge. Due to his defeat by the Communists, the national leader, President Chiang Kai-shek, who had lately fled to Taiwan, had been keen to establish his legitimacy and base in Taiwan as a contrast with the regime of the ‘Communist thief’ in China. The title ‘Communist thief’, by which Mao was mostly known in the textbooks, implies that he and the Communists stole Chiang’s legitimacy over the whole of China. On the one hand, Chiang Kai-shek did not admit that he had been defeated as the ruler of Mainland China. On the other hand, he wanted his fellow-citizens to recognise his legitimacy there, although he was ‘temporarily’ obliged to retire to Taiwan. Chiang Kai-shek, however, never gave up his claim over Mainland China. Therefore, it is understandable that the textbooks on civic education under his government’s control focused on the
inculcation of an uncritical, state-centred patriotism and a specific set of values associated with charisma. In the 1980s, however, civic education no longer had to fulfil the function of political control. The textbooks on civic education began to introduce the importance of law and order, but the emphasis was on the concept of being accountable to the government. Moreover, the interpretation of the law and order issue was to reinforce obedience to the state, rather than any idea of being given the franchise. As Liu remarks, the overall purpose of civic education in Taiwan thus involved encouraging socio-political conformity and a sense of duty to the state (Liu, 2004: 101).

Many restrictions were removed on the abolition of martial law in 1987, but the textbooks on civic education have still not substantially amended the content relating to democracy. Hsieh (1988*) carried out longitudinal research between the 1960s and the 1980s into textbooks for elementary schools on the subject of 'Social Studies'. Comparing the versions of 1968 and 1988, he discovered that the political socialisation of young people has changed over time, but shared some similar features, as many scholars had found before (cf. Leu, 1981*; Yang, 1994*). In the version of 1988, there is obviously less attention paid to the theme of the pledge, loyalty and obedience to the state. Although a large proportion of the content was
still relevant to anti-Communism, the expression of hostility was more moderate in
the version of 1988 than it had been twenty years before. Taking the versions of 1978
and 1988 as research data, Lin (1994*) affirmed that the discourse of
anti-Communism in the textbooks of ‘Social Studies’ had changed from
overwhelmingly irrational condemnations of Mainland China to contrasts between it
and Taiwan with a modicum of rationality, especially when considering everyday life
across the Strait. In the textbooks published in the 1980s, the content indoctrinated
students into a belief that the adherence of the Chinese leader to Communist ideas
had led to desperate living conditions for Mainland Chinese. The image of China and
the Communist ideology behind the Chinese regime was now, however, less hostile
than it had been in previous decades. The proportion devoted to the state ideology,
for instance to nationalism, patriotism and anti-Communism, had dramatically
decreased, yet the introduction of democracy had not substantially increased.
Moreover, the civic virtues of democracy, rationality, respect and critical thinking,
for example, were little acknowledged in the textbooks.

In the 1990s, the textbooks on civic education tended to build up diverse areas of
civic knowledge and its relevance to contemporary life. In the textbook on the
subject of ‘Civics and Morality’ for secondary schools in the academic year 1991/2,
according to Xue et al, the most popular theme was politics, followed by the traditional virtues. Significantly, the theme of political ideology was least mentioned. Among the 6 volumes of 'Civics and Morality', the theme of politics was mentioned as many as 90 times, but the theme of political ideology fewer than 10 times. In the field of politics, the major section was about public policy (18.42 per cent). The following sections, which occupied more than 10 per cent of the total content, included: political communities (12.11 per cent), political principles (11.05 per cent) and public virtues (10.00 per cent) (Xue et al, 1994: 43*).

There is a study on political socialisation as taught in the elementary and secondary schools, which concerns the presentation of civic education with related topics in the 1990s. Apart from the subject of 'Civics and Morality', the study also looked at other textbooks related to civic education elsewhere, including the subjects of 'Chinese', 'Social Studies' and 'Life and Ethics' for the elementary school and the subject of 'Chinese' for the secondary school. According to Yang (1991*), these textbooks emphasised ideological indoctrination as enunciated in the *Three Principles of the People*, though the *Three Principles of the People* was not presented as a formal subject to be taught in elementary and secondary schools for the understanding of the nation. However, they lacked any consideration of public opinion. These textbooks
also devoted much space to describing national policies and government infrastructures, but omitted such important concepts of democracy as civic rights and responsibilities, not to mention civic participation. Therefore, in the early days of the 1990s, even though civic education was no longer a course in anti-Communist ideology, even the concept of civic knowledge was relatively weak, let alone civic skills and choices.

Moreover, there was a legacy of authoritarianism shown in a few topics in the textbook on 'Civics and Morality'. For instance, in the topic of authority, the presentation stresses only the importance of the ruling party (the Kuomintang) and the charisma of the national leaders, especially Chiang Kai-shek and his son (also his political successor) Chiang Ching-kuo, whom people must worship (Xue et al, 1994: 47*). There was no democratic concept of party politics. The national leader of the polity was retained, in an informal hereditary style. Nevertheless, the Taiwanese government removed the ban against organizing parties in 1987. However, in the textbooks very little attention was paid to party politics, even in the early 1990s. Moreover, the kind of party politics introduced in the textbook on 'Civics and Morality' was in fact the concept of one-party politics. In a chapter called 'Democracy and Party Politics', for instance, the author indicated that the destiny of
the current ruling party was immortality, since ‘the honour of the Kuomintang has already been integrated into the nation-state’ (Wang, 1998: 298*). One-party rule still dominated the regime in reality, though the ruling party always boasted that Taiwan was a democracy. ‘Democracy’ has always been an ironic term.

From the mid-1990s, however, the textbooks on civic education have begun to describe contemporary political life and civic knowledge. Deng (2000*) analyses the presentation of democratic values in 4 volumes on the subject of ‘Civics and Morality’ for use in secondary schools in 1998. She points out that there are four dimensions which had received much attention by then: democratic beliefs, citizens’ duties, citizens’ responsibilities and the operation of the rule of law. However, very little attention had been paid to national identity and civic participation. In fact, the issue of national identity became controversial in Taiwanese society after the mid-1990s. The government has deliberately shifted from a China-centred to a more Taiwan-centred national curriculum (Liu, 2004: 102). The controversy is based on an advocacy of the independence of Taiwan or the proposal of reunification with China. The following questions were asked: Should Taiwan be described and considered ‘The Republic of China’, ‘The Republic of China on Taiwan’ or ‘Taiwan’? Should
the population term themselves Taiwanese or Chinese? National identity remains ambiguous in the curriculum.

According to the Ministry of Education, in the first phase of the new curriculum for secondary schools, they would teach the subject ‘Understanding Taiwan’ instead of ‘Civics and Morality’. These two subjects, however, overlap in many places throughout their content. Song (2004*) compares the textbooks on the subjects of ‘Civics and Morality’ published in 1977 with ‘Understanding Taiwan’ published in 1998. In his analysis, both textbooks stress the concepts of democracy and the rule of law, based on the Three Principles of the People. The subject of ‘Civics and Morality’ continued to transmit the ideology of the Three Principles of the People and Confucian virtues, while the subject of ‘Understanding Taiwan’ revealed some political events which had previously been hidden. However, the worship of the leader always maintained its importance in the textbooks. More recently, the debate over national identity has narrowed down to two contenders: Chinese identity vs. Taiwanese identity. Thus, the subject of ‘Understanding Taiwan’ was presented to show that the government had attempted to navigate a middle course between proponents of outright independence, on the one hand and die-hard supporters of re-unification, on the other.
The textbooks on civic education have been talking more openly about many dimensions and have attempted to meet the need for a modern democratic society. Apart from the discussion of national identity, the implications of being 'anti-democratic' were seen as more of a threat. Wang (1998) devises a benchmark by which to measure the implications of 'anti-democracy' revealed in the textbooks on 'Civics and Morality' and 'Understanding Taiwan' between 1983 and 1997 for secondary schools. Her categories of 'anti-democracy' include 'being obedient to the authorities', 'worshipping the authorities' and 'restraining the awareness of civic rights', for example. In her analysis, the frequency of use of the category ‘anti-democracy’ went down from 206 times in the version of 1983 to 136 times in the version of 1992. Finally, in the version of 1997, ‘anti-democracy’ occurred only 32 times (Wang, 1998: 295-318*). After the revision of the national curriculum published in 1994 and subsequent changes, the textbooks have become realistic offering knowledge about modern forms of government in accordance with the transition of Taiwan’s political system to greater democracy, although ‘anti-democratic’ implications sometimes remain in the textbooks.

Significantly, between the mid-1990s and the early 2000s, the proportion of the content devoted to civic knowledge and participatory skills gradually increased.
Among the ‘Civics and Morality’ textbooks in the versions of 1989, ‘Civics and Morality’ and ‘Understanding Taiwan’ in the versions of 1994 and also ‘Social Studies’ in the versions of 2001, Lin indicates that the topics of political systems, the operations of politics, nation-state systems, civic rights and political participation have been raised. Also, the skills of communication have been given much attention in the later versions of the textbooks. Since 1994, the textbooks have looked at the issues of ‘the rule of laws’ and ‘multiculturalism’. The content of civic knowledge has expanded. However, democratic behaviour has been insufficiently discussed (Lin, 2004*).

As the national curriculum strove to integrate seven main themes and the production of textbooks opened to private firms, civic education was no longer taught as a monolithic subject, to a single standard, and presenting a dominant ideology. In the meantime, the Taiwanese political system approaches greater democratisation. It seems that these changes will lead civil education into a free and pluralistic scenario. However, civic education is not confined to the themes presented in the textbooks alone. The classroom atmosphere (Torney et al, 1975; Blankshenship, 1990; Hahn, 1998; Hahn and Tocci, 1990), pedagogy and extracurricular activities (Jennings and Niemei, 1971; Sears and Hughes, 2005), teachers’ characteristics and school
governance (Beck, 1977; Niemei. and Junn, 1998), among others, also have an impact on the democratic knowledge, skills and attitudes learned by the students. In Taiwan, the teaching process, including the choice of pedagogy, supplementary materials and textbooks, in the schools remains hierarchical: the upper administrators decide, the teachers implement and the students accept. ‘If the school authorities retain authoritarianism and the teachers deliberately alter the course of civic education for other purposes, education for democracy will not take effect’ (New Taiwan Weekly, 2003: 101*).

The reform of the national curriculum seems an outcome of the ‘liberalisation’ of knowledge, but the implementation of textbooks for it is chaotic. This may result in a confused spread of knowledge. With the various versions of textbooks published by different publishers, the subject is not taught coherently even within the same school. Sometimes different grades use different editions for the same course. The schools in different regions even adopt different versions of the textbooks and teach them at the different grades. Many teachers at the grassroots complain that this kind of change has caused great difficulty since the teaching materials lack coherence and there are knowledge gaps between different regions (Shiu, 2003*; Central Daily News, 19/10/2004*) Therefore, the changes in the education policy and the national
curriculum, as well as the deregulation of textbooks, have brought about more controversies than before. The textbooks on civic education have not so far dealt properly with the introduction of democracy. People’s sense of democracy is still immature. Moreover, the external arrangements for the textbooks have added many uncertainties to the content of democracy as it is taught in civic education. They all make it harder to form a consensus on democracy not only for contemporaries but also for the coming generations.

2.5. Discussion

At the most basic level, the expression of democracy denotes a government based on the acquiescence of the governed, as against dictatorship or oligarchy, which are based on wealth, ascription or simple power (Chambliss, 1988: 139). Early in the twentieth century, the revolution led by Sun Yat-sen overthrew the monarchy and set up a republic on the basis of the people, the so-called Republic of China. For him and his followers, democracy as a political system was plainly an import from the West, although Sun’s Three Principles of the People incorporated some Western democratic concepts. From a normative viewpoint, the definition of democracy strictly derives from the literal meaning of the term, ‘power of the people’ (Sills, 1972: 112). However, ‘the government of the people, by the people and for the people’, in
Abraham Lincoln’s famous Gettysburg Address, is similar to the basis of Sun’s *Three Principles of the People*. In the early days of civic education, Sun’s doctrines were fundamental to modern Chinese politics, whereby students acquired a basic knowledge of democracy.

When the Republic of China split into two regimes across the Strait of Taiwan in 1949, the *Three Principles of the People* was used in Taiwan as an ideological symbol against the Communist regime in the Mainland China. Civic education was sacrificed for decades in order to consolidate the legitimacy of Taiwan and to deepen the hatred for Mainland China. The concept of ‘democracy’ has been partly interpreted and partly misinterpreted at different times. It was simplified as a synonym of anti-Communism, but only served the ruler’s political intentions, according to the political and social context. The national curriculum once stressed democracy as one of its goals, yet the interpretation of democracy has been at times ambiguous. Before the 1980s, accordingly, the textbooks on civic education were biased towards political ideology and focused on anti-Communism, the worship of the leader and patriotism.
The national leaders in Taiwan took the *Three Principles of the People* as the supreme and only ideology with which to oppose Communism. The purpose of civic education was to consolidate the ruling party’s legitimacy and apotheosize the national leaders by means of political ideology. As Lewis indicates, ideology is able to constitute the specific interests of power elites as the common-sense knowledge of ordinary people (Lewis, 2002: 423). This literally reflects the concept of ‘hegemony’ as used by Gramsci, ‘describing how the domination of one class over other is achieved by a combination of political and ideological means’ (Abercrombie et al, 1988: 111). This usage not only stresses the political and economic control exercised by a dominant class but also its success in projecting its own particular way of seeing the world and human and social relationships, so that this is accepted as ‘common sense’ and part of the natural order by those who are in fact subordinated to it.

Traditional cultural features and the political and social context have become the breeding-grounds for hegemony. It is agreed that Confucianism played a decisive role in the early stage of civic education in Taiwan (Liu, 2004: 111). The values stressed were to a large extent directed by Confucianism’s central ideals for the virtues of humanity and harmonious social relations. However, some features of Confucianism are, in the eyes of the West, incompatible with liberal democracy. As
Huntington frankly indicates, the ‘Confucian heritage, with its emphasis on authority, order, hierarchy and the supremacy of the collective over the individual, creates obstacles to democratisation’ (Huntington, 1996: 238). In Confucianism, the state is an extension of the family. The features of hierarchy, respect for seniority and obedience to authority, for example, also apply to both the state and the family. It is not surprising that a paternalistic form of authoritarianism is popular among many East Asian societies where there has been Confucian influence. In Taiwan, the dominance of one-party politics for a long time has been regarded as evidence, to some degree, of this kind of paternalistic authoritarianism.

The government in Taiwan always claimed that it was the only faithful adherent to Sun’s ideology of democracy, but the government had strict control over society for a long while. In the eyes of the West, Taiwan was labelled as one of the authoritarian regimes which were still far from democracy. The government in Taiwan was double-faced. In civic education it promoted the notion of democracy, but this was conditioned by the government’s bias, while it blocked any opposing voice which hoped to challenge its legitimacy. Democracy – despite what the government persistently believed and insisted – was an ironic contrast to the society at the time. Obviously, civic education in Taiwan served to ensure people’s consent to the state’s
ideological domination. The concept of democracy was an unrealistic accolade, nothing more than a symbol for propaganda.

After the 1980s, economic growth, industrial development, the rise of civic society, the awaking of intellectuals and the middle class and an increase in the number and membership of social movements, drove Taiwan to move to democratisation. Taiwan had achieved the 'social requisites of democratisation' summed up by Seymour Martin Lipset (1994). According to Chu, the regime's transition in Taiwan has meant not redemocratisation but democratisation 'from scratch' (Chu, 1996: 69). Not only was any change of political system new to Taiwanese people, but so also was the knowledge of democracy acquired by the people.

On the micro level, political learning is based on a cognitive development whereby individuals construct meaning about the political system (Hahn, 1998: xi). For the most part, the Taiwanese people in the 1980s encountered a cognitive change. The concept of democracy which they have been taught was now under reconstruction. On the macro level, it is the individual concepts, beliefs, attitudes and values which will in the aggregate sustain the political system (ibid). Therefore, the absorption of democratic values is one of the essential conditions in which democratisation is most
likely to thrive. A country which has a democratic system is not equal to a society. This requires social systems to support its relevant values.

In the 1990s and the early 2000s, civic education in Taiwan had a pragmatic approach, as shown in the national curriculum. The textbooks on civic education accordingly tended to build up diverse dimensions of civic knowledge and approaches to contemporary life. Significantly, civic education has lately begun to pay attention to Taiwan’s own land, history, political system and society, which implies a shifting away from affiliations to Mainland China to respecting local ethnic identities and cultures and constructing and honouring Taiwan itself as the new political and cultural identity of its people. From Law’s point of view, the refocus on Taiwan is another sign of the democratic education movement (Law, 2002: 72).

The subject of ‘Understanding Taiwan’, which later accompanied the subject of ‘Civics and Morality’, was planned to raise the public consciousness of this national identity. However, it also provoked many controversies, since being ‘pro-Taiwanese independence’ implies the cutting of the umbilical cord with China. As Liu indicates, the planners of the curriculum intended to view Mainland China less as the all-important national homeland and more as Taiwan’s closest and most intimate
East Asian neighbour (Liu, 2004: 107). The concept of democracy was no longer simplified as an ideology to strengthen anti-Communism, while the indoctrination of civic knowledge was intertwined with the most sensitive issue (i.e., Taiwan's national identity) in politics.

As textbook production officially opened to private enterprises and the new national curriculum integrated the seven main theme studies by the late 1990s, civic education was no longer taught according to a single standard. It also began to take an interdisciplinary approach. However, the quality, the coherence and the adoption of the textbooks have been seriously criticised. The reform of the education policy aimed to ease the burden of study, resulting from placing such great emphasis upon passing the entrance examination of high schools. The introduction of the textbooks which should allow this was, however, in turmoil. It seems that deregulation has moved towards the liberalisation of knowledge, but perhaps at the cost of clarity over the diffusion of knowledge. This may result in a crisis as regards civic education. When civic education does not present adequate content, students will only have a smattering of democratic knowledge. Moreover, when those who have inadequate democratic knowledge take charge of presenting and instilling civic education for the next generation, it may be asked whether the teaching of democracy will be biased.
Although nowadays civic education no longer acts as a propaganda machine for hegemony, it needs to construct modern values, not least those of democratic behaviour, to support the democratic system. Therefore, civic education should concentrate on helping students to think critically and to develop a different sense of identity. Students also should learn to respect differences, and thereby to make decisions democratically in order to promote the public good.

2.6. Conclusions

Political systems may be accepted as democratic, while the democratic culture may not keep pace with them. As Zakaria remarks, the political systems of Asian countries may become formally democratised, yet the new democracies will still carry many illiberal characteristics, due to the slow acquisition of liberal democratic values and beliefs among its elites and populace (Zakaria, 2003). Civic education in schools has been regarded as a potential mechanism for the transmission of democratic values and beliefs and the shaping of the political culture from one generation to another. Although Taiwan has already established a new democratic system, the legacy of authoritarianism remains in civic education.
Civic education in Taiwan has been bound by its political context, which has served the rulers' intentions for so long. The public understanding of democracy was wrapped in a distorted ideology. It was not until recently that civic education was geared to reinforce the identity of the status quo. Civic knowledge and civic competence were use for indoctrination, while civic behaviour was substantially neglected. Moreover, the inconsistency of the national curriculum and the ambiguous interpretation of 'democracy' have resulted in further confusion. The knowledge of democracy which people in Taiwan absorbed encountered a process both of construction and reconstruction. The term 'institutional inconsistency' used by Direnzo to cover the kind of socialisation and social change which gives people the confusing and dysfunctional syndrome of learning-unlearning-relearning is applicable to the situation. This process not only continues to characterise socialisation in modern society, but also has significant consequences today for both the individual and society (Direnzo, 1990: 37).

People in Taiwan have become gradually aware of the forms and the competence of participation, but they have not yet recognised the importance of the supporting values of democracy. Undoubtedly, the list of democratic values may vary from one society to another, depending on different reconciliations of modern democratic
values with fundamental cultural values. Although traditional Confucianism has some conflicts with Western democracy, at least the personal ethic on the basis of respect for humanity in Confucianism can apply to modern Taiwanese democracy, where there never is enough respect for differences, especially in discussions about the national identity. For example, when people in Taiwan debate their national status as Taiwanese and independent vs. acquiescing in reunification with China, they often fall into treating it as a zero sum game and abandon reason in their discussion. This shows that in reality people in the modern democratic Taiwan lack the knowledge to use and participate in this system and show some respect for it.

Ironically, civic education in Chinese culture was introduced as a combination of civics and humanity. The title of the subject of ‘Civics and Morality’ taught in civic education simply demonstrates this implication. Therefore, civic education in Taiwan needs to reconsider its roots in traditional culture and some ways of adjusting the tension between East and West. It is also important to create the conditions in which mutual tolerance between different elements within civil society can find a place. This is subject to the general respect for basic democratic values. As Jessop (1999) suggests, this requires not only the building of democratic institutions but also the formation of subjects who are committed to democratic practices and to deliberation.
Ideally, young people who receive effective programmes though civic education in schools should become informed, responsible and competent participants in the political life of their communities, the state and the nation. However, political learning takes place not only before adulthood but also continues throughout adult life. In the 1980s, Turkle observed that the ever-expanding technology of the electronic computer continuously outpaces the capacity of society to absorb the consequences of its seemingly endless application (Turkle, 1984). A modern society cannot isolate itself from this kind of endless application to political socialisation. In the 1990s, it was generally expected that ICTs would provide a means for extending citizens’ access to public information and decision-making so as to create more informed and active citizens in the information age. E-government represents such an expectation. Civic education in schools is essential for learning democracy. In the information age, people should be concerned over the way in which civic education in schools supports other democratic practices with ICT applications and even more, the converse. Civic education in schools is important for helping people to practise e-government. Moreover, e-government can be regarded as another form of civic education. The next generation may have an opportunity to use e-government to meet public challenges and promote the country’s civic culture.
CHAPTER 3
GOVERNING IN THE INFORMATION AGE:
POLICY INITIATIVES OF E-GOVERNMENT

3.1. Introduction

What is the effectiveness of governance? Such a question may be explored from the point of view of the reforms in the public sector over the past few decades. Historically, the main approaches to government reform were in relation to bureaucratic structure, but in more recent times they have evolved with more of an entrepreneurial spirit. In particular, rapidly developing computer technology and the Internet have become popular in the private sector, while the concepts of ‘reinventing government’ and ‘new public management’ have gained new energy and now dominate public sector reform.

ICT has always been employed to improve government performance (Brown, 1999; Fountain, 2001). ‘IT’ is identified as the key to the reinvigoration and indeed to the reinvention of public administration (Bellamy and Taylor, 1994:3). The rise of the
Internet presents government with another opportunity to carry further new forms of public management. Many governments believe that e-government may be conducive to the reinvention of government (Bovaird, 2003) and it is seen 'as a tool to achieve better government' (OECD, 2003a: 23). Therefore, e-government can be seen as a pragmatic use of the most innovative ICTs, mainly through the Internet, to improve the way that government performs its business, including the enhanced, cost-effective and efficient delivery of services, information and knowledge.

In Taiwan, the government was already moving towards automation and computerisation in the public sector in the 1980s. In the mid-1990s, the Taiwanese government embraced the global experience of 'reinventing government' through information technology, developed new thinking in governance and took up the work of e-government. However, how does the Taiwanese government initiate policies to develop and manage e-government projects, so as to present them to the public? This chapter aims to trace the development of e-government initiatives in Taiwan. I firstly discuss the relationship between the reform of governance and the use of ICTs. Secondly, I set out the operation of e-government, including its components, the types of function and the stage models. Thirdly, I outline a brief background to and history of e-government initiatives in Taiwan. I further look at the key e-government
projects, concentrating on the course of action taken and the implementation of these projects. Finally, I argue that Taiwanese government practises a ‘governmental egotism’, based on government needs, which is more inclined to use information technology to reorganise itself than to incorporate more of the public in its operation.

3.2. The Reform of Governance and the Use of ICTs

Modernising the public sector with the aim of increasing service quality and productivity has been widely discussed (Pollitt and Bouckaert, 2000). The reform of governance was an important agenda item long before the advent of the term ‘e-government’. Its efficiency can be judged by the administrative and material performance of a government. The core purpose of government is to govern, to rule and to ensure stability through the exercise of authority. It is thus generally assumed that a government bureaucracy is charged with administering government business. Since the 1970s, the public sector had been increasingly criticised for its lack of efficiency, accountability and responsiveness to citizens. The X-inefficiency problem was often cited to highlight the tendency of government to add to its costs and to generate additional slack in the form of excess cost in providing public service (Leibenstein, 1966). Some scholars identify two distinctive causes of such a problem: first, that centralisation and bureaucratisation made policymakers too remote from
the locus of decision, information and action; second, that the existing arrangements and procedures for accountability were weak or were even absent (Osborne and Gaebler, 1992; Heeks, 1999). As a result, a sequence of reforms of governance occurred in the so-called ‘golden age of administration reform’ (Wright, 1994) of the 1980s and 1990s.

The significant change in the public administration was the proposal to take an entrepreneurial model for government. Proponents sought to replace the bureaucratic paradigm, consisting of processes, procedures, hierarchy and closed systems, with a new paradigm which emphasised results, services, participation and an open system. This new paradigm affirms the requirements of modern governance in a democratic government. As Frederickson (1996) indicates, the effectiveness of democratic government and modern governance depends on the energetic exercise of bureaucratic discretion. The introduction of ‘New Public Management’ or ‘Reinventing Government’ in the early 1990s, for instance, aimed to create greater efficiency in administration and to lead to greater democracy. The combination of enterprise spirit and public administration offered unprecedented opportunities to substitute slimmed-down and flatter organizations with greatly expanded management information flows (Bellamy and Taylor, 1998). ‘Do more with less’ and
"being customer-oriented" have therefore lately become the slogans in the organisations of governance and are applied in many countries across the world. The practical projects in many countries include *National Performance Review* and *Reinventing Government* in the United States, *Next Steps and Citizen's Charter* in Britain, *Administrative Reform* in Japan and *Remaking Government* in Taiwan, among others. The initial report of the *National Performance Review* dubbed the resulting phenomenon 'electronic government' (Seifert and Relyea, 2004:11). Hence, Hughes says that 'the movements of new public management and e-government are mutually reinforcing' (Hughes, 2003: 201).

The reform of governance reflects the need to reduce red tape, together with the size and cost of bureaucratic government. The introduction of ICTs is seen as a new tool to help government performance to improve. Dutton et al (1993, 1994) list many benefits from the electronic delivery of public service, such as faster and more appropriate responses to requests, lower administrative costs, more efficient and effective prevention of fraud or misuse of public services, and assistance to local and national economies by facilitating the government-to-business interface (Taylor et al, 1996: 269). In other words, the administratively-focused approach has gradually changed into a focus on customers, serving citizens and trading partners directly by
providing services, information and transactions on-line via the Internet (Devadoss et al, 2002: 253). In this context, e-government was discussed as a means of using computer applications to enhance information management and service provision. As Fountain (2001) argues, e-government brings government ‘closer to the people’ by meeting the expectations of service users regarding convenience, accessibility and timeliness. Most of the pioneering countries setting up e-government have aimed to improve the efficiency of public service delivery and to save some of the costs of administration. They have embraced many aspects of the transformational agenda promoted under the rubric of the ‘New Public Management’, which calls for the reinvention of government (Osborne and Gaebler, 1992).

E-government can be an important tool to help the public reform agendas of the government to advance, whether as a tool for reform, a catalyst for change initiatives, or an instrument for improving processes and governance (OECD E-government Task Force, 2003b: 79-82). More recently, however, the discussions on governance have shifted from the institutions of the state to its political processes. Another approach of electronic service delivery is to bring government closer to citizens and to encourage broader and more active participation in decision-making by developing an infrastructure to allow ‘electronic democracy’. This is what Raab et al
discuss under the heading of 'information polity' (Raab et al, 1996, Taylor, 1996: 266). E-government is essentially an interesting process which incorporates the elements of efficiency and participation in an Internet-based system. The discussion of efficiency is central for the government, while the discussion of participation emphasises the empowering of citizens and the extension of their personal autonomy in the decision-making process of making laws. Participation increasingly reflects the adjustment of people's status from passive customers to active citizens. Governments thus look much like the sort of political community in which citizens have the capacity to participate, rather than waiting to be passively served by the state as the agent. Jaeger suggests that e-government itself does not merely improve the efficiency of government's public sector operations and the interaction between citizens and government, but may threaten to undermine the core governance form of government – hierarchy and the command-and-control mode of decision-making (Jaeger, 2002:366). Such changes in the concept of governance have influenced the framework of e-government.
3.3. The Operation of Evolutionary E-government

3.3.1. Components

The performance of e-government involves many factors within and outside government. For many practitioners, the factors of 'front office' and 'back office' must be taken into account. The former means that the information and services provided and the interaction between governments and citizens, including businesses (OECD, 2003a: 73). E-government is easy to evaluate according to visible contents and tangible interfaces. The feature of government websites is the immediate factor affecting citizens' use of e-government.

The 'back office', however, refers to the hidden sides of e-government, such as the information infrastructure, the institutional framework and administrative reform, the leadership, central co-ordination, public-private partnerships and risk management, among others. The 'back office' is deployed to support the internal operation of the government business, which is not normally accessible or visible to the general public. Most efforts are steered by the government itself and their outcomes mainly demonstrate the enhancement of efficiency within the public sector. As the OECD explains, e-government will help bring about these reforms, while e-government itself requires such reforms in order to be successful (ibid, 87).
In the implementation of e-government, the 'back office' and the 'front office' always go hand in hand. If the government is a business, customers/citizens are concerned with the content and quality of government services. In effect, the 'front office' has a more direct influence on the public than the 'back office'. The public perception of and attitude towards e-government can be quickly built up through its experience of government websites. Transforming the traditional public services into online services is a common route. Moreover, e-government can provide alternative forms for citizens to engage in public affairs, such as online consultation, online voting and online discussion forums, which create more opportunities for citizens to deliberate and make direct decisions. Therefore, it spreads democracy to use information technology and telecommunications networks to assist in the political process (Catt, 1999: 146). The change is particularly significant for the advocates of direct democracy or 'strong democracy'.

The businesses of e-government are aimed at different groups. Many scholars (Fountain, 2001: 6; Seifert and Petersen, 2002: 198; Jaeger, 2003: 324) provide an overview of Internet applications and interactions between different sectors – government to government (G2G), government to business (G2B) and government to citizen (G2C) – as they evaluate the transformational potential of e-government.
Other scholars (Seifert and Relyea, 2004: 12) further extend from G2G to another
domain, government to employee (G2E). However, the discussion concentrating on
civil servants and the government agencies remains within the government itself.

In practice, the interaction of G2G facilitates intergovernmental operations and
allows the sharing of data and the conducting of electronic exchanges between
governmental sectors. This involves both intra- and inter-agency exchanges at
different governmental levels. Regarding the interaction of G2B, involving the sale
of governmental goods and the procurement of goods and services, the initiatives
facilitate activities such as procurement, licensing and other activities supporting
business-based economic growth. For businesses, G2B can result in an increase in
public awareness and in opportunities to work with the government, cost saving and
efficiency in the processes of transaction and procurement, and new avenues for
selling surplus items. Like the focus on efficiency of G2G initiatives, many G2B
initiatives are promoted to streamline and improve the consistency of
personnel-intensive tasks (Cohen and Eimicke, 2001; cited by Seifert and Petersen,
2002: 200). Finally, in terms of the interaction of G2C, the initiatives can encourage
citizens’ involvement and interaction with the government and enhance the ‘degree
E-government can allow citizens to be more informed about government information, resources and services and make it easier for them to deal in everyday matters with governmental agencies, ranging from obtaining marriage licences to paying taxes and responding with their opinions. Like G2G and G2B initiatives, those of G2C are also driven by an interest in better government through improved efficiency and more reliable outcomes. Therefore, G2G can be seen as the work which arises inside the government, while G2B and G2C can be regard as activities outside government (see Table 3.1 below).

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Factors</th>
<th>Sectors</th>
<th>Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>External</td>
<td>Front Office</td>
<td>G2B</td>
<td>Private Businesses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G2C</td>
<td>Citizens</td>
</tr>
<tr>
<td>Internal</td>
<td>Back Office</td>
<td>G2G/G2E</td>
<td>Government Agencies</td>
</tr>
</tbody>
</table>

3.3.2. Functions

Much of the rhetoric surrounding e-government falls under various major domains such as citizen-government interaction, information access and dissemination and streamlining government services (Aldrich et al, 2002: 351). More specifically, e-government can be divided into three broad areas: the development of the use of IT within government; the provision of electronic information by government to citizens
in a transparent, user-friendly and cost-effective manner; and the two-way interaction of government with citizens (Muir and Oppenheim, 2004: 175). The observations of Muir and Oppenheim essentially lay out the ways in which e-government works.

The effects of e-government are not only related to structural factors within and outside the government but also concerned with intentions to initiate e-government. The features of e-government reflect the logic of planning and operating this initiative. Many studies of e-government agree that it involves the following activities: the dissemination of information, the application and transaction of online services and the interaction between the government and citizens. A study of IDeA identifies three primary categories as the characteristics of e-government: e-governance, e-service and e-knowledge. E-governance includes engaging or representing citizens and facilitating communication among government agencies. E-service involves securing and providing government services through electronic means, such as information delivery and searchable information databases. E-knowledge means that the government uses communication technologies to disseminate information from which citizens gain knowledge (IDeA, 2002, cited by Zhou). Zhou’s study concerns the work done in the ‘front-office’, which focuses more on the needs of G2C, including G2B, than on those of G2G. She (2004) adopts
the same categories to analyse the content of the national and provincial government websites in Mainland China. She indicates that the national sites were dominated by e-knowledge with a particularly strong focus on the posting of rules, regulations and policies. She further points out the importance of the portal site, which is the most popular form for including e-governance and e-service at all government levels in Mainland China. She suggests that government websites are presented to fulfil the function of a one-stop shop where citizens can carry out a variety of tasks, especially those involving multiple agencies, without needing to make contact with each agency individually (Hasson, 2001: 4; Seifert and Petersen, 2002: 201).

Moreover, Chadwick and May (2003) outline three ideal-typical models of the way in which e-government may reconfigure citizen-state relations: the managerial, consultative and participatory models. First, in the managerial model, e-government not only enhances delivery of information, but also the delivery of services, allowing citizens to target their requests more accurately and receive faster responses at a lower administrative cost. Second, in the consultative model, the process of consultation extends from low-level information-gathering towards a quasi-deliberative level of interaction. Third, the participatory model allows widespread participation in the process of decision-making and makes all relevant
information available to the public (Chadwick and May, 2003: 274-282). The first two models stress the vertical flow of state-citizen communication. However, the consultative model can be regarded as a transition to the participatory model which restores democracy. The participatory model creates more horizontal and multidirectional interactivity than do others. In their analysis of the cases of the US, UK and EU, Chadwick and May believe that the managerial model has dominated, at the expense of ‘consultative’ and ‘participatory’ possibilities. This accordingly reinforces the existing power structure and falls short of anything approaching ‘e-democracy’ (ibid, 293, 296).

In sum, three primary categories indicated by IDeA and three ideal-types of e-government proposed by Chadwick and May share common features. I thus generalise three distinctive features as the functions of e-government: information, transaction and communication, as illustrated in Table 3.2. First, the feature of information is regarded as a vital resource for providing ‘better’ policy and administration. E-knowledge and the partial consultative model stress the access and dissemination of information. Second, the feature of transaction equips the user with the essentials of government services as a government business. E-service and the managerial model focus on the streamlining and convenience of government services.
Third, the feature of communication directly involves the interaction of citizen-government, which can work through different forms. E-governance and the participatory model are of course part of this feature.

<table>
<thead>
<tr>
<th>Features</th>
<th>Categories</th>
<th>Ideal-Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction</td>
<td>E-service</td>
<td>Managerial Model</td>
</tr>
<tr>
<td>Information</td>
<td>E-knowledge</td>
<td>Consultative Model</td>
</tr>
<tr>
<td>Communication</td>
<td>E-governance</td>
<td>Participatory Model</td>
</tr>
</tbody>
</table>

### 3.3.3. Stage Models

A number of studies suggest that the development of e-government addressed by several stage models and these stages are quite strongly related to the features of e-government mentioned above. To begin with, many scholars stress its administrative functions, including the delivery of information and service. The highlights accurately the features of transaction and information, as illustrated in Table 3.2. They believe that the mature stage of e-government is joined-up e-governance or enterprise transformation.

Layne and Lee portray a four-stage growth model of e-government based on technical organizational and managerial feasibilities. Their model has been widely
discussed by the following researchers: Moon, 2002; Ronaghan, 2002; and Chou, 2004. The stages of this model are: (1) cataloguing; (2) transaction; (3) vertical integration; and (4) horizontal integration. At the cataloguing stage, government only transmits its publications and information over the net and there is no interaction between government websites and users. At the transaction stage, electronic transactions offer a better prospect than simply ‘cataloguing information’ of improved efficiency for both the customers and the agencies in dealing with a transaction at any time. This is the beginning of two-way communication through a one-stop online help centre. At the stage of vertical integration, the focus falls on the process by which the government deals with its business. Government agencies at different levels are thus expected to connect and communicate with each other. Finally, horizontal integration refers to system integration across different functions in that a transaction with one agency can lead to automatic checks against data in other functional agencies. Such integration combines the vertical integration of the previous stage and facilitates ‘one-stop shopping’ for citizens (Layne and Lee, 2001: 126-134). Significantly, this model distinguishes vertical integration (i.e., the integration of similar functionalities between different levels of government) from horizontal integration (i.e., systems integration across different functions). However, this model mostly draws on the provision of information and the delivery of public
services, but never mentions political participation online.

Similarly, Deloitte Research indicates six dynamic stages of e-government, namely, (1) information publishing/dissemination; (2) official two-way transactions; (3) multi-purpose portals; (4) portal personalization; (5) clustering of common services; and (6) full integration and enterprise transformation (Deloitte Research, cited by Silcock, 2001: 89-91). Moreover, Seifert and Petersen illustrate a four-stage arrangement of e-government stretching from (1) presence; (2) interaction; and (3) transaction; to (4) transformation (Seifert and Petersen, 2002:196-198). Then, Dunleavy et al (2003) indicate that their almost omnipresent ‘stages’ model can be found in e-government: (1) a basic site; (2) electronic publishing; (3) interactive e-publishing; (4) a transactional Web-site; (5) joined-up e-governance. The order of stages in this model of e-government is slightly different from that of others and their propositions seem to focus on Web-based public services. The development of e-government is more or less centred on the provision and dissemination of information and the procedures of service delivery. As Layne and Lee (2001) optimistically predicate, both vertical and horizontal integrations deploy information and data sharing among different functional units and levels of government for a better quality of online public service. Therefore, most of the scholars mentioned
above, including Layne and Lee, believe that the mature stage is intended to provide a holistic government. They depict two-way communication as a simple ‘request and response’, yet something which is of little relevance to the process of political participation. Apparently, they exclude Web-based political participation and public deliberation from e-government.

According to Table 3.2, however, communication is another feature of e-government. Democratic governments have gradually begun to pay attention to two-way communication, especially as regards citizens’ contributions to the political process. Apart from the stages of providing information and service delivery, some scholars plan to add the stage of political participation. Hiller and Belanger (2001), for example, propose a five-stage framework of e-government, beginning with (1) information dissemination/catalogue and passing through (2) two-way communication (request and response), (3) services and financial transactions to (4) vertical (intergovernmental) and horizontal (intragovernmental) integration, eventually reaching (5) political participation. The previous four stages are related to Web-based public services in the administrative arenas, like other models in the administrative approach. The development always begins with the most basic form for disseminating information online and proceeds through to ‘transaction-based
e-government. For example, in the model proposed by Hiller and Belanger, the fifth stage highlights Web-based political activities by citizens in which government Web-sites include online voting, online public forums and online opinion surveys for more direct and wider interaction with the public.

Like Hiller and Belanger, West (2004) also provides a four-stage e-government development, which puts different government agencies on the road to transformation: (1) the billboard stage; (2) the partial-service-delivery stage; (3) the portal stage, with a fully executable and integrated service delivery; and (4) interactive democracy with public outreach and features for enhancing accountability (West, 2004: 17). The highlight of interactive communication moves beyond a service-delivery model and brings the component of democracy into e-government.

These stage models are closely associated with the features of e-government, as illustrated in Table 3.3. However, it should be noted that e-government practices may not follow a pure linear progression. The stages do not always appear in chronological sequence. For one thing, as Moon indicates, the government can pursue various components of e-government simultaneously (Moon, 2002: 427). Therefore, the framework of the stage model simply provides an exploratory tool to
examine the evolutionary nature of e-government. It is agreed that, for the
government, the main potential of e-government lies in strengthening public
participation and improving administrative effectiveness. In practice, however, the
progress of e-government largely depends on the authority’s attitude, especially in
the opening stage. Does it believe that the mature and final stage of e-government
should be a transaction-based holistic service? Or does it show any interest in
incorporating political participation as a stage in the progress of e-government?
Moreover, what happens if development is discontinuous, due to changes in
initiatives over time? What happens if initially favourable environments and
supportive external conditions change? In the following sections, I draw on the
Taiwanese experience of developing e-government and examine its initiatives and
related national projects.
### Table 3.3 Stage Models of E-government with Proposals

<table>
<thead>
<tr>
<th>Proposals</th>
<th>Stage</th>
<th>Definition</th>
<th>Transaction Stage</th>
<th>Definition</th>
<th>Communication Stage</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layne &amp; Lee</td>
<td>1</td>
<td>Cataloguing</td>
<td>2</td>
<td>Transaction</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Vertical integration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Horizontal integration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deloitte Research</td>
<td>1</td>
<td>Information</td>
<td>3</td>
<td>Multi-purpose portals</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Official two-way transactions</td>
<td>4</td>
<td>Portal personalization</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Clustering of common services</td>
<td>6</td>
<td>Full integration and enterprise transformation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seifert &amp; Petersen</td>
<td>1</td>
<td>Presence</td>
<td>3</td>
<td>Transaction</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Integration</td>
<td>4</td>
<td>Transformation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dunleavy et al</td>
<td>1</td>
<td>Basic site</td>
<td>4</td>
<td>Transactional web-site</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Electronic publishing</td>
<td>5</td>
<td>Joined-up e-governance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Interactive e-publishing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiller &amp; Belanger</td>
<td>1</td>
<td>Information</td>
<td>3</td>
<td>Service and financial transaction</td>
<td>5</td>
<td>Political participation</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Two-way communication</td>
<td>4</td>
<td>Integration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>1</td>
<td>Billboard</td>
<td>2</td>
<td>Partial-service delivery</td>
<td>4</td>
<td>Interactive democracy</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Portal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.4. Context of E-government Policy Initiatives in Taiwan

#### 3.4.1. Origin of E-government Initiatives

In the mid-1980s, a project for general scientific and technological modernisation was initiated in Taiwan. Subsequent government programmes have promoted
computerisation and its extended application in the public sector. Although the use of IT-based networks in the public sector may not necessarily guarantee competitive advantage, they are viewed as primary mechanisms for creating more efficient and better ways of organizing services (Rocheleau, 2000: 414-435). In the early 1990s, the international trend was to apply to public administration the latest developments in communications, particularly the Internet. The global experience of ‘reinventing government’ through information technology developed new thinking in governance. The concept of ‘reinventing government’ was proposed by Osborne and Gaebler (1992); it aims to make government work more efficiently and sought to explain how the entrepreneurial spirit is transforming the public sector. ‘Reinvention is only the latest initiative in the enduring cycle of reform’ (Ingraham, 1996: 454).

The Clinton-Gore administration of the United States is the most obvious representative of those which embraced this idea for streamlining government by means of ICTs. In his book on reinventing government, Gore emphasises computing and communication technologies as the best way to improve governmental effectiveness and productivity (Gore, 1994). The Clinton-Gore administration thus devoted much effort to the National Information Infrastructure (NII) project, which highlighted the idea of ‘electronic government’. As Miller remarks, at the core of the
NII lies a universal service, which can be defined as eliminating barriers so that everyone has the chance to use the evolving telecommunications systems for meaningful and effective participation in all aspects of society (Miller, 1996:212). E-government is thus the specific arena – providing virtual government services – which evolved from this concept.

In parallel, the British Tories across the Atlantic, published in 1996 the Green Paper, Government Direct, which outlined ideas for using information technology to empower people in their dealings with government. When the Labour government took power in 1997, ‘electronic service delivery’ was at the centre of its programme for ‘Modernising Government’. In other European countries, the European Commission actively began to promote ICTs as a strategic tool for economic growth in developing counties. The G7 Government Online Project thus suggested that the use of computer technologies in public administration could improve governmental effectiveness and productivity. This trend affected Taiwan too. According to the preface to the primary government project on e-government in Taiwan,

‘on the basis of improving their national and international competitiveness, many advanced countries across the world have put much effort into the ‘National
Information Infrastructure' (NII) and establishment of 'e-government'...Therefore, under such international circumstances, Taiwan needs to catch up soon with this trend' (RDEC, 2001: 5*).

3.4.2. NII and the Reform of Government Administration

The emergence of e-government in Taiwan was driven by the reform of government administration. In 1993, the Executive Yuan, the highest administrative organ of the state (often referred to as the Cabinet), approved a plan to establish the ‘Government Information Network’. This network was expected to connect the databases across different public sectors and improve the efficiency of public service.

The former Premier, Zhan Lian (1994) initially indicated his desire to set up the ‘National Information Infrastructure’ (NII), which was to be directly overseen by the Executive Yuan. The government imitated the American NII project and then in August 1994 launched its task force – the ‘Steering Committee for the National Information Infrastructure (NII) Development’ - to execute the Taiwanese vision of the NII. The main mission of the unit is to promote and develop the information infrastructure across the whole country. Moreover, the Research, Development and Evaluation Commission (RDEC), one of the commissions under the Executive Yuan,
is the Yuan's principal consultative body in charge of government structural reform and the implementation of e-government. Specifically, under the RDEC, the Department of Information Systems Management supervises overall planning, programming, budgeting and the coordination of e-government.

According to the Steering Committee for the NII Development, the 'E-Government Project' is part of the dimension which deals with facilitating public service and public administration. This accurately follows government policy on the reform of government administration. In the Plan for the Reform of Government Administration approved on 23rd January 1997, the Execute Yuan proposed to 'set up e-government, creating competitiveness' at the implementation stage (RDEC, 2001*). For the task force of the NII, however, the priority was to increase the number of Internet users. The striking slogan then was, 'Aiming to Reach Three Million Internet Users in Three Years'. The government expected to set up 7,000 kiosks throughout all the towns and villages in the country (Jin, 1997: 56-59*). The mass media were quickly flooded with the government's slogan, to great effect. The national statistics show that the number of Internet users in Taiwan increased from 440,000 to 4.02 million between 1996 and 1999 (ACI-FIND, 2002: 4*). The number of Internet users indeed increased at remarkable speed. However, the government's Internet venture
remained at the exploratory stage.

Like the American NII, the task force of the Taiwanese NII planned to set up e-government to facilitate public services and public administration. The Prime Minister, Wan-zhang Xiao, was at the time highlighting the importance of reinventing government on various public occasions, claiming that there were three issues in this regard: 'networks', 'human resources and the civil service' and 'legitimacy'. In particular, in the area of 'human resources and the civil service', e-government would be the leading actor (Lee, 2003). The government meant to build up a national project centred on the information network in response to the idea of 'reinventing government', following NII plans, which would encompass all aspects of the economy, transportation, education and culture with the ultimate aim of achieving an 'information society'. As the Taiwanese NII clearly put it in the *Action Plan for the National Information Infrastructure in Taiwan*:

> 'it is necessary for us to establish information networks and electronic systems as well as e-government...to promote innovative policies based on the information infrastructures. As a result of this, we will restore our strength' (Steering Committee of NII Development, 1997*).
For the government, therefore, e-government is a step on the road to reinvention. Its leaders believe that to develop e-government is an important strategy in the process of government reform. The chairman of the RDEC, Chia-Cheng Lin, stressed the motivation behind e-government in his speech on 'innovating and transforming government through information technology – the Taiwanese experience' on 30th November 2002. He said:

‘the driving force of the e-government is perhaps the application of business management for public administration purposes and the use of modern information technologies for effective information management and the establishment of improved relations with consumers, partners and suppliers...E-government has been a high priority for the organization, service and process re-engineering of government' (RDEC, 2002a*).

In an international seminar on 'open government' held in Seoul in February 2003, Chia-Cheng Lin, together with Chung-Ing Shih, the director of the Department of Information Management under the RDEC, presented a paper on public management reforms in Taiwan. They maintained that ‘to develop e-government is an important strategy for improving administrative efficiency and spur on government structural
reform and process re-engineering' (RDEC, 2003*). Undoubtedly, the entrepreneurial spirit of the private sector has been introduced into the bureaucracy of the public sector through the experiment of e-government, mainly as a way of improving administrative efficiency and enhancing governmental effectiveness and competitiveness.

3.4.3. Progress of E-government Initiatives

In 1997, the concept of e-government in Taiwan was for the first time realised in practical terms. The Executive Yuan officially passed the Mid-term E-government Implementation Plan in that year. The project envisaged a period of three years, from 1997 to 2000, in which to develop a basic government intra-network and provide a more convenient civil service through technology. This was a stage in the development of information infrastructure. The information infrastructure was firstly established in the government and then externally extended from urban areas to rural areas. A parental public service – the Government Service Network (GSN) – was founded to link all government organizations and agencies across the whole nation. In the official report of 1998 in the Mid-term E-government Implementation Plan, the Prime Minister, Wan-zhang Xiao, instructed that all agencies should establish a service network, promote the exchange of official documents online and move
toward the direction of ‘no paper work, no paper verification’ (RDEC, 1998*).

As indicated by Xiu-juan Yang, the former director of the Department of Information Management under the RDEC, the second stage of the Mid-term E-government Implementation Plan laid stress on the application of public administration provision (RDEC, 2002b: 32*). The government made an effort to supply the various kinds of hardware and software now required for government in its administration and transactions. In 2000, the Executive Yuan passed a new Action Plan for E-government: 2001-2004 to replace the Mid-term E-government Implementation Plan (1997-2000). The new action plan aimed to link all government agencies through networking and to provide versatile Internet-based services. In other words, the government turned its attention to the importance of a ‘holistic government’ and of ‘managed knowledge’ as salient features of e-government. As the RDEC clearly points out, the goals of e-government are to support ‘competent government’, ‘planned government’, ‘competitive government’ and ‘team government’, ‘promote government re-engineering’ and achieve government ‘service modernisation’ and ‘management knowledgeability’ (RDEC, 2003b: 2*).

As the number of possible items in the content of e-government services grows, it
has now become possible to offer citizens seamless access to a set of related services.

The impetus of 'service integration' results in 'holistic government'. The channels for delivery of such an integrated service include websites, one-stop shops and call centres, which offer services flexibly delivered to the target groups (Horrocks and Bellamy, 1997). The Blair government in Britain, for instance, is the advocate of 'joined-up' government. It adopted a 'one-stop shop' approach to allow citizens to find information and transact their business in one searchable integrated portal, as well as to strengthen the links within the public sector. The concept of the one-stop shop has been put into action in the setting up of the governmental portal. Accord to one report, the leaders in e-government will be those countries which fully exploit the portal model (Accenture, 2001). 'The portal provides the facility for personalisation by the user', as Muir and Oppenheim observe in their review of the development of e-government in many countries, including Canada, USA, the member states of the European Union, South Africa, Hong Kong, Australia and New Zealand. They conclude that 'the emergence of government portals is without doubt the most significant development' (Muir and Oppenheim, 2002: 184).

Since 2001, the 'one-stop service' has become a highlight of e-government projects in Taiwan. The Taiwanese government passed the plan for the Integrated
E-government Entry Point for Taiwan to build up a one-stop (joined-up) government service in the same year. This is a unified window for public services, which claims to provide links to all relevant government websites, thousands of downloadable forms and hundreds of online application services. This project conforms to the requirements and the deployment of systems development set out in the Action Plan for E-government: 2001-2004 (RDEC, 2001*) and the Action Plan for National Information and Communications Development published later the same year (National Information and Communications Initiative Committee, 2001). The former plan principally follows the previous Mid-term E-government Implementation Plan and draws up several measures to be deployed, including ‘strengthening the infrastructure’, the ‘promotion of widespread computerization and raising of government information application levels’, ‘enhancement of government information dissemination, sharing and integration’ and ‘implementation of government online services’. In particular, in the final measure, the government has committed itself to promoting both G2B and G2C services and to operating procedural reform so as to provide a ‘single window’ and ‘one-stop service’ (RDEC, 2001*).

The change of regime in Taiwan, however, affected e-government initiatives. After
Taiwan's Democratic Progress Party established a new government in 2000, the first time in forty years that power had changed hands, the movement to reinvent government brought to 'knowledge' and 'national development' issues a 'holistic' approach. This is also in accordance with the recent international trend towards a 'knowledge-based economy'. According to the OECD, identifying 'best practices' to promote a knowledge-based economy is a focal point for workers in science, technology and industry (OECD, 1996). Moreover, Bovaird (2003) believes that ICT impels changes to organisational structure, process and behaviours in the public services. In a knowledge-based society and economy, ICT acts therefore both as the main engine for organisational growth, through the generation of 'new' knowledge and a 'iron cage' for organisational stability, based on the use of and reproduction of 'old' knowledge (Bovaird, 2003: 41-42). His views partly stem from a paper commissioned by the Public Management Service of the OECD in 2002 as part of its E-Government Task Force initiative and partly from work commissioned in 2002 by the Office of the e-Envoy in the UK. The e-Envoy, for example, indicates that the strategy of e-government is to ensure, by means of joined-up online government services centring on the needs of customers, that the country's citizens and business derive maximum benefit from the knowledge economy (e-Envoy, 2003). Therefore, for a government, e-government may provide a favourable environment in which
private investment can boost productivity, modernize public services and give everyone the opportunity to participate in the global information society.

After reviewing the history of the information revolution, Robins and Webster remark that recent innovations in information and communications technologies have generally been discussed from a narrow technological or economic perspective. It has been a matter of technological assessment or of the exploitation of new technologies to promote industrial competitiveness and economic growth (Robins and Webster, 1999: 110). Taiwanese e-government initiatives in 2000 began to introduce more radical ideas and involve themselves with other national plans, including the Plan for a Knowledge-based Economy in Taiwan passed in 2000 and the Challenge 2008: the Six-year National Development Plan announced in 2002. All these plans were based upon President Chen’s ambition to develop a national governing policy for the ‘Green Silicon Island’. The plan of 2000 was meant to help the knowledge-based economy to become the driving force for continuous economic development, ‘maintain the growth of existing high-tech industries and help the transformation of traditional industries’ (Council of Economic Planning & Development, 2003*). Moreover, the plan of 2002, a comprehensive six-year national plan, would transform Taiwan itself into a ‘Green Silicon Island’ which
could compete in the global economy.

The government rhetorically explains that ‘Green’ stands for the environment and its protection; while ‘Silicon’ indicates that technology leads national development based on a knowledge economy; and ‘Island’ represents a society based on a legitimacy whose source is in the community. The goal of this ambition is a future in which Taiwan can simultaneously enjoy a beautiful natural environment and a convenient high-technology life and develop as major features a knowledge-based economy, a society with justice and a sustainable environment (Council for Economic Planning and Development, 2000b*). This ambition encompasses also the creation of another ‘Economic Miracle’ by means of its leading high-technology industries, but also addresses environmental problems over the next few years. As the first Prime Minister in the new government, Fei Tang, says, ‘Green Silicon Island’ sums up a future Taiwanese society as it starts to embrace ‘informationalisation’, ‘globalisation’ and ‘environmentalism’ (Government Information Office, 31/08/2000).
3.5. Key E-government Projects in Taiwan

3.5.1. Building up the Infrastructure: the ‘Mid-term E-government Implementation Plan’

Clearly, this plan began with two visions of e-government: firstly, providing innovative public services for citizens and, secondly, reforming civil servants' operating procedures and re-engineering the handling of public business. The first aim is to enable the public and businesses to obtain conveniently a variety of government services via a broad range of channels at any time and place and to provide integrated interdepartmental services, such as ‘exemption from the need for physical transcripts’, ‘paperless applications’, ‘multi-point access’, ‘24-hour services’ and ‘delivery of services to the home’. The aim thus reflects the approaches of G2C and G2B.

The second aim, meanwhile, is to improve the efficiency of public administration through the approach of G2G, including G2E (i.e., to civil servants). The government aimed to build up the ‘Government Service Network’ (GSN) as the Internet service provider (ISP) for government agencies and department at all levels, which would accelerate communication and document interchange by implementing an electronic document exchange and gateway system.
According to the RDEC, the essential framework of e-government has three sections: (1) a telecommunication infrastructure and system; (2) a channel for government information and public services; (3) the application of administration services. The first section undoubtedly follows up the work of NII and lays the foundation for subsequent online public and administration services. There are 5 sub-plans in the detailed implementation, including (1) an information infrastructure; (2) a government service network; (3) an electronic gateway system; (4) network security; and (5) an electronic certification service; these have become the foundation for a number of other plans for online services in the field of public administration, such as e-taxation, e-procurement, e-publication, e-village services, one-stop services and so on (RDEC, 1997: 17-18*).

Among the various sub-plans, the government stressed that the establishment of GSN was the priority. Online services would be available at a later stage (Lee, 1999: 12*). All government services are linked together via the GSN and electronic gateway system, which has become the intranet of the government. The GSN began formal operations in July 1997 and since then has provided Internet access to intra-government and a wide range of basic application services. The official source shows that by July 1999, more than 800 government agencies had created
e-government networks and offered website services. Additionally, nearly 4000 local
government offices have provided email boxes for enquiries (RDEC, 2002b: 32*).

With online services and the circulation of data and official documents between
government agencies, network security and an electronic certification service are
essential. According to a booklet describing the GSN, it has organised a network
security team and established a GSN-CERT website. GSN online security services
include: network infrastructure and the detection of failures in website security, an
online scanning service, website mechanisms, IP filtering and so on (RDEC, 2003c:
3*).

Moreover, in order to provide secure and reliable online application services, the
RDEC outsourced this commission to the public-private body, Chunghwa Telecom,
in February 1998 to establish a 'Government Certification Authority' (GCA) which
would deal with the electronic certification services needed in various e-government
applications. The authority has developed an electronic certification framework,
consisting of a Public Key Infrastructure (PKI) and a Privilege Management
Infrastructure (PMI), to provide key certification services and a qualification
certification service respectively. The plan for digital signature and Online ID, for
example, is in the control of the GCA. Electronic certificates have been used for such
applications as online taxation, motor vehicle registration, electronic payments, electronic procurement and the electronic exchange of official documents.

However, the GSN is not only the foundation of the information infrastructure, which links 18 network nodes and 3 major domestic networks; it is also the former name of a government portal site. According to the RDEC, the framework of GSN has three main functions: an Internet skeleton service, a searching service and an online public service (Lee, 1999: 13*). The Internet skeleton service provides a way of accessing the Internet, including a dial-up service, a fixed line service and an ADSL service. This accurately reflects the first section of the framework for e-government – a telecommunication infrastructure and system – according to the RDEC. The two other functions of GSN, however, are relevant to the services shown on the website. Before the full operation of GSN, the government was already experimenting from time to time with different online services on the GSN website.

At first, from November 1995 to September 1996, the only function available on GSN was to search the catalogue of government information set in the Gopher interface. An index for finding official data, it was called the ‘Public Sector Gopher’ and later changed its name to the ‘Electronic Window of Public Services’. It had a
simple searching function in a static linkage.

Next, from September 1996 to September 1998, the 'Search Engine' and 'Data Base Management System (DBMS)' were introduced. The GSN adopted the GAIS system (http://gais.sc.ceu.edu.tw) as the framework for its search engine and the management of its database. The GAIS is a general-purpose and scalable online search system, which includes hierarchical searching and a scattered index model. As a result, the system can process searches and operate both vertically and horizontally.

Thirdly, from September 1998 to January 2001, the design of GSN became a springboard for the portal site of a subsequent plan. As well as its search function, the GSN began to set up a public-oriented one-stop-service and an administration-oriented electronic exchange within government. For the public, the online services available included such functions as e-taxation, e-procurement and online motor vehicle registration services. E-taxation, for example, provides for many transactions, such as online tax filing and payments, general income tax bar code filing and the payment of taxes and rebates via account transfer. In 1998, the government began a trial of consolidated income tax by this means. One year later, more than 12,000 application forms were processed through it (Yan, 1999: 31*). The
online motor vehicle registration service, begun in November 1998, enabled people to deal with their licence replacements and renewals and the payment of traffic fines, for instance, up to a total of 17 items. For the government, the implementation of interagency electronic document exchange began on a trial basis in July 2000 and, by integrating government information, began to lower operating costs sharply and raise service quality and administrative efficiency. These services not only operate as a one-stop service, but also incorporate both 'front office' and 'back office' elements. For example, the implementation of digital signatures and online IDs issued by the GCA are features which had previously only been associated with 'back office' functions.

E-government changes the methods used in government services, which leads to greater personalisation and customisation. In an interview for this research with the former director of the Department of Information Management, Xue-jin Lee, she said:

'once e-government goes into action, all aspects of government change radically, from its processes to its instruments and then to people's familiarity with it. The next stage of e-government will be the appearance of "wisdom government",
which provides a faster and more convenient DIY service for citizens than ever before’ (ibid, 33*).


In this action plan, the government followed the outlines of previous initiatives. E-government was regarded as the form to be taken in the long term to ensure the continuity and integrity of the government information services, such as its Management Information Systems (MIS), which it needed for the early computerization of services, Office Automation (OA), which was needed to modernize official document processing and the Geographical Information Systems (GIS) needed for administrative planning and decision-making. Through different uses of ICT, government agencies hoped to form a central network, providing the service of delivering and processing information for government agencies, private firms and the public (RDEC, 2001*). The action plan, however, still focused on the improvement of public administration and an improved quantity of public service, as set out in the Mid-term E-government Implementation Plan (1997-2000).

As the RDEC makes clear, in terms of public policy, e-government is an important
strategy for reforming administrative procedures and government structure, as well as advancing the Green Island project (ibid*). Hence, the ultimate aim of the plan is to raise national competitiveness by promoting Internet applications throughout society and industry. E-government has incorporated other national projects, with a view to creating wealth based on knowledge and attaining a holistic information society in Taiwan in the near future.

The implementation of this four-year plan takes three forms: (1) improving the efficiency of public service; (2) raising government’s working efficiency; (3) developing the quality of decision-making (ibid*). The whole procedure is firstly to ‘improve the environment for accessing information infrastructure’, secondly, to ‘strengthen the application of information’, thirdly, to ‘popularise the dissemination, sharing and integration of governmental information’ and fourthly, to ‘promote online government services’.

In the process of e-government implementation, the working of GSN has always been at the centre of government policies. It does, however, inevitably rely on both technical infrastructure and application systems to support it. The first two forms of implementation stress the importance of the environment required to access the
information infrastructure, including the provision of broadband network services (e.g., GSN) for government agencies, continuously strengthening the trustworthiness of online information and e-government network security (e.g., PKI) and creating an e-government security audit system. These measures involve the passing of information-related laws and the promotion of computer literacy among civil servants. For example, the form of government' working efficiency pays attention to the computerisation of manual services and information applications.

In order to advance administrative efficiency, the government not only plans to promote computerisation but also to develop decision-support applications with GIS. After the RDEC assessed earlier efforts in the *Mid-term E-government Implementation Plan*, the government indicated that the diffusion and integration of information is the part of the procedure which most concerns them. Therefore, in the third form of implementation, regarding the dissemination, sharing and integration of governmental information, the government continues to promote administrative data interchange. This eliminates the need for physical transcripts through electronic document exchanges and gateway systems. Moreover, the establishment of GIS databases was meant to achieve integration and support government decision-making.
Obviously, from the first procedure to the third, the implementation of e-government emphasises G2G and the ‘back office’.

The focus on G2B and G2C began to be apparent in the third form of e-government implementation. The government plans to provide a variety of online applications enhancing business efficiency in terms of G2B and to establish an integrated government portal service which will promote operating procedure reform so as to provide ‘single window’ and ‘one-stop service’ in terms of G2C. The website of GSN would thus be transformed into a portal site which provides online services, as laid down in the previous initiative.

3.5.3. One-stop Shop: the ‘Integrated E-government Entry Point for Taiwan’

It was not until 2002 that a clearer picture developed of the design of the government’s portal site. Following the plan for the Integrated E-government Entry Point for Taiwan, the portal site was officially introduced to the public in March 2002 and named ‘My E-government – The E-government Entry Point for Taiwan’. This was intended to connote that it belongs ‘to the people’ and is ‘personalised’. The government hoped that this single and unified website would accelerate the flow of
online information and services from all government agencies, thereby enhancing the quality of public service and promoting the development of relevant e-government and e-commerce applications and industries (RDEC, 2003d*).

The one-stop service is a long-term plan, which according to the RDEC, was scheduled to begin in 2001 and to continue until 2007. In the first stage (2001-2002), the government emphasised the basic information infrastructure, including the deployment of basic applications systems and links to information and services on existing agency websites. In the second stage (2003-2004), the plan concentrated on online service delivery and integration with local government services. Finally, integration between different systems and agencies was to be developed in the third stage (2005-2007).

The RDEC has played the leading role in implementing this design, including drafting the work items and constructing and coordinating the portal site. The management work, including the technological design and maintenance, the development of application service systems, data updating, education and training, as well as advertising and promotion, has then been outsourced by the RDEC to the private sector. For the RDEC, e-government focuses on service delivery to customers.
Hughes argues that such an approach ‘is most likely to operate in conjunction with the private sector, while acting upon the production processes is also very much a part of managerialism’ (Hughes, 2003: 196). Outsourcing is the use of an external organisation to provide a service which might otherwise be provided in-house. It might also provide access to skills and ideas which are not available in-house and so help to fill skill or time gaps (Heeks, 1999: 80-81). The project contractors appointed in August 2001 were Digital United Inc. (also known as Seednet) and Taiwan Novell. Seednet, the second-largest ISP in Taiwan at the time, already had experience of network construction and integration. However, Taiwan Novell, specialising in net service development, was required to build up the framework of the ‘Enterprise Information Portal’ (EIP), including the eDirectory, iChain and DirXML (Seednet Press Release, 2001). The product of all this work was the inauguration of ‘My E-government’ in March 2002.

Subsequently, Seednet (http://www.seed.net.tw) took over the main outsourcing contract from the RDEC, developing a strategic partnership with Yam Digital Technology Co. Inc, to continue the commission. Yam’s Yam.com (http://www.yam.com) is one of Taiwan’s major e-commerce portals. Taiwan Novell, however, was withdrawn from developing the portal site and gradually turned into an
information supplier. Seednet now mainly deals with the management of databases, online service control and operations and plans to develop further interactive online services. Yam.com meanwhile is responsible for such functions as website maintenance, search engines, news services, newsgroups, web-based email and online promotions (Lee, Seednet Interview, October 2003*). The outsourcing of work to the private sectors has therefore gained increasing importance as the projected has developed. This reflects one of the strategies in the concept of ‘reinventing government’, which involves making partnerships between the public sector and private firms. The RDEC believes that application systems will keep up with IT trends and provide state-of-the-art application services (RDEC, 2003d*) and thus relies on the outsourcers’ technological skills, innovation ability and experience in website maintenance.

At the beginning of this plan, the government clearly drew a pragmatic picture rather than a rhetorical vision. The portal site has three pillars: (1) information retrieval; (2) electronic service delivery; and (3) interactive communication. As Figure 3.1 below shows, the portal site becomes a common inter-system platform to integrate back office application service systems from different agencies and then to deliver electronic services and promote interactive communication. The design of such front
office services brings in many of the functions already described in international research, as Table 3.2 illustrates. The content available on the portal site, 'My E-government', follows the third stage of GSN. However, 'My E-government' is a substantially more ambitious project than GSN, in that it is meant to provide a real-time, high-speed, diversified, comprehensive and high-quality service to meet three main needs.

Figure 3.1 Three Main Service Functions of the Government Entry Point

![Diagram showing the three main service functions: Information retrieval, Interactive communication, Electronic service delivery.]


Firstly, the 'My E-government' website (http://www.gov.tw) provides a search engine, a directory service, an information guide arranged by topics and a real-time image service by WebCam. This enables the users to quickly find all online government
information. According to its self-assessment, the RDEC believes the powerful Internet search engine on the 'My E-government' is capable of retrieving more than 3 million online documents, allowing classified queries about over 4,500 agency websites and over 45,000 items of agency contact information (ibid*). With regard to the guide to topical information, the website contains basic information on the country and government, important administrative and policy documents and other relevant information. Finally, the real-time image service is a unique entertainment service on the website, which provides 24-hour live views of important national landmarks, picturesque places and local weather.

Secondly, the primary electronic services include a facility for downloading application forms and documents, electronic delivery services and links to relevant service websites. Initially, the website provided 135 electronic delivery services and 1,000 application documents and forms for downloading. In accordance with the timetable of the Action Plan for E-government: 2001-2004, 1,500 downloadable forms and documents and 400 online application services were to be made available online by 2004 (RDEC, 2001*). Online application services are backed up with electronic certification, online payments and interfaces with agencies' conventional information systems. This service has a dual role, in that it integrates service
processing in government management while also offering electronic application forms for the public to fill in and send back.

Thirdly, according to the RDEC, interactive communication on the portal site can be briefly divided into two domains: the dissemination of government news and public feedback. The portal site covers many news services, such as the daily activities of government agencies, real-time news with photos and an electronic bulletin board. The site also provides an email query system, a discussion forum, an online public opinion survey and an online poll. The function aims to expand public participation in administrative affairs and improve communication between the government and the public.

A successful and easy-to-use portal site requires a comprehensive and user-friendly interface, including a powerful search engine, a clear arrangement of directory services and an effective interactive communication mechanism. However, the effectiveness of the ‘front office’ must rely on the efforts of the ‘back office’. In other words, G2B and G2C cannot work alone. Therefore, G2G is always found to be one of the main barriers to the use of the one-stop service; as the RDEC admits, ‘government agencies at all levels must increase their commitment of resources to
online information and services' (RDEC, 2003d*). The work thus not only includes the information and services available online, but also the coordination of enhanced deployment of online information and services by government agencies.

3.5.4. Other Initiatives Related to E-government

Technology has always been a crucial factor in the development of the economy in Taiwan. The move from a low-skilled labour-intensive economy to a high-skilled capital-intensive economy has required considerable innovation and resourcefulness on the part of both government and the private sector. The government always believes that national development and competitiveness are based on the application of technology. To strengthen the ability to innovate and to upgrade high-technology industry have become pivotal in various national plans, including the *Science and Technology White Paper: Prospectus of a Technological Nation* in 1997 and the subsequent *Plan to Develop a Technological Nation* in 1998. Moreover, in the *Plan for a Knowledge-based Economy in Taiwan* of 2000, the government showed its concern to extend a knowledge-based economy to all the activities of society.

Referring to the definition of a knowledge-based economy used by the OECD and the prospect of a new economy, the government in Taiwan indicates that
globalisation, the diffusion and application of knowledge and cooperation with industries are necessary for developing a knowledge-based economy in Taiwan. The government hopes that in ten years’ time, the increased investment in research and development (R&D), the growing numbers of high-technology industries, more highly-skilled labour and the associated productivity gains will match the level of most other advanced countries with a knowledge-based economy. It is envisaged that the output value of knowledge-intensive industries will come to more than 60 percent of the gross domestic product (GDP) in Taiwan over this period. The government hopes that the deployment and expense of its broadband network will be the same as in the United States (Council for Economic Planning and Development, 2000a*). Hence, the government has been keen to provide a suitable environment for industries to develop the knowledge-based economy.

In my interview with the deputy chairman of the Council for Economic Planning and Development (CEPD), a cabinet level agency of the Executive Yuan which plays a crucial role in supplying information in the making of Taiwan’s economic policy, she indicated that the Internet has made the accumulation and application of knowledge faster than ever before. In the network based on the Internet, both public and private sectors will work effectively (Lee, CEPD Interview, October 2003*). Her statement
implies that the appeal of e-government was to improve a problematic bureaucracy and consequently to enhance the environment for the national economy and investment. In the Plan for a Knowledge-based Economy in Taiwan, there are 57 themes for action and 238 practical measures. The CEPD planned six main steps, as follows (CEPD, 2000b*):

1. Establishing the innovation systems and fostering the industries which embraced them.
2. Building up the Internet infrastructure and its installed environment.
3. Broadening the application of high technology and the Internet from industry to people's daily lives.
4. Systemically scrutinizing the education system as well as cultivating knowledge workers.
6. Planning to obviate the social problems which might result from this economic transformation.

The first three of these steps concerns the supply of innovation based on the Internet, while the last three concentrate on the use of such technology by civil servants and
the public. According to their principal strategies, the private sector seems to dominate the development, while the public sector plays an ancillary role. The government reinvention should at the same time proceed with the restructuring of enterprise. In his inaugural speech of 2000, President Chen claimed that the future government might not take on the role of 'leader' and 'governor'. Rather, the government would have the role of 'supporter' and 'attendant' to meet the expectations of the private sector. The fourth step is the change in which can be observed. Conceptually, the importance of customer-oriented government accurately echoes the principal aim of the knowledge-based economy – 'to give service'. As a way of developing a customer-oriented government, the Plan for a Knowledge-based Economy in Taiwan reveals three measures: (1) online service; (2) training for civil servants; and (3) outsourcing to the private sector. These measures have already appeared in the Action Plan for E-government: 2001-2004 and the Integrated E-government Entry Point for Taiwan. For example, the establishment of the portal site (My E-government) not only provides an online service for the public but also offers both online and offline training for civil servants. Technically, the government makes use of resources from the private sector, hiring firms to improve the design and the maintenance of the portal site.
A knowledge-based economy employs e-government to strengthen the efficiency of public services and to cooperate with the private sector, while *Challenge 2008: the Six-year National Development Plan* of May 2002 draws a picture of social development with endless information, for example, technological innovations, sustainable communities, the protection of natural resources, development of human resources, medical care, renewable energy, cultural innovations and international exchanges. Over the six-year course of the plan, NT$2.65 trillion will be invested to improve living standards and the business and investment climate in Taiwan.

The government outlines ten themes and formulates three major reforms of government, banking and finance together with four major investments, covering the cultivation of talent; research, development and innovation; international logistics; and a high-quality living environment. In terms of national economic development, *Challenge 2008: the Six-year National Development Plan* proposes to increase R&D spending to 3 percent of GDP and to promote Taiwan as the best base for the global manufacturing and supply centre of high value-added products, as well as a regional operations headquarters for both domestic businesses and multinational enterprises. In terms of social development, investment will also be made in the transportation and information infrastructure, intended to stimulate the development of related
industries and efforts will be made to attract foreign tourists to Taiwan and increase total annual visits to over two million. By 2008, Taiwan will be home to over six million subscribers with broadband Internet access and will lead other Asian countries in electronic networking. The implementation of an information infrastructure is indicated in the sub-plan, called Developing a Digital Taiwan, also named the e-Taiwan project (2002-2007), which involves e-government, e-industry, e-society and e-infrastructure. Among the projects, e-government is the major driving force (Lin, 2002*).

The so-called ‘Digital Taiwan’ concept is about applying digital information and communication technologies to propel Taiwan into a new knowledge-based economy, upgrade the competitive advantage of local industries, establish an efficient government and promote a high-quality ‘information society’. The government optimistically believes that government re-engineering can be carried out smoothly to improve the quality of services and strengthen national competitiveness with the help of scientific technology. Once e-government is fully accepted, people will be able to enjoy the benefits of accessing the convenient, safe and stable world of the Internet (Government Information Office, 21/05/2002). Obviously, Developing a Digital Taiwan follows the theme of the Plan for a Knowledge-based Economy in
Taiwan but ‘upgrades’ it to the national level. This implies that the government is paying more attention to the benefits of electronic development.

In conclusion, the potential for the information economy to expand economic and social opportunities has been highlighted in a number of government initiatives. As Chia-Cheng Lin, the chairman of the RDEC indicates, because cost savings in production can no longer support continuous economic development, the authorities are making e-government an effective information and communication infrastructure to ensure the speedy development of the information economy (Lin, 2002*).

Effective e-government requires a very different type of investment from that currently being directed to IT projects. Indeed, the e-government initiatives cannot work alone. They not only address common issues of service delivery, coordination and management across agencies as a whole, but also provide technological solutions to critical problems, such as security, privacy and interoperability, to support the work of e-government. Although services need to be created using best practice, the effectiveness of e-government will be determined by its acceptance and use by the whole of society. In other words, e-government does not merely involve the ‘front office’ or the ‘back office’; rather, it reflects a change in society. Therefore, the
building of an incentive mechanism for both the general public and business is needed when the government promotes e-government initiatives. This requires other social systems, for instance, education in schools and both traditional and new media, to provide sufficient support.

3.6. Discussion

Theoretically, a government’s ideal role may be dynamic, geared to adjusting and adapting to the changing social, economic and political environment. Undoubtedly, increasingly advanced information technologies have added complexity to the notion of governance. Furthermore, the emergence of e-government may offer a chance to improve the effectiveness of governance, as an alternative to traditionally bureaucratic forms of organization and more recently the market-like form of service delivery based on the reinvented idea of government after its public sector reform. However, it may be asked what kind of approach is taken by government planners in drafting and implementing their initiatives? Has the creation of e-government merely reflected the needs of public administration?

In the implementation of its modernizing initiatives, the Taiwanese government replicated other global experiences of ‘reinventing government’ and their new use of
ICTs. The government planners in Taiwan thus laid out the deployment of NII and e-government, which was primarily an aspect of the reform of government administration. The information infrastructure established by the NII has paved the way for increased Internet use. A similar logic has applied to the primary development of e-government initiatives, which emphasise the establishment of GSN. The information infrastructure has always been a precondition for any application of ICTs.

In the Mid-term E-government Implementation Plan, the GSN was conceived as a government service network, mainly for the use of civil servants, to enable them to deal with governmental transactions and document interchange, by way of an intranet. Most of the rhetoric in the plan stressed the importance, the benefits and the implementation of the GSN in the 'back office'. The presence of the 'front office' (i.e., online services) relies on the support and integration of the 'back office' (i.e., the offline intranet). Moreover, the practical measures mostly focused on the popularity and applications of the Internet among government workers themselves. Therefore, it is not surprising that a description of the information infrastructure and public administration using ICTs takes up much of the plan. There has been much experimentation with diverse online functions in backing up governmental
transactions. E-government was depicted as a government service in the form of the Internet, as an alternative to traditional government service procedures. Although the government claimed that e-government was a customer-oriented service, the online service for the public was at the time very basic and limited. Moreover, in practice, some online service procedures still required applicants to provide offline documents and submit them to the office in person, causing needless complexities and complaints. On the surface, e-government improves the efficiency of public administration and saves the cost of transactions and manpower in the government. The authorities, however, have at the same time transferred some of the workload and the complexities of public administration to the applicants.

Even in the Action Plan for E-government: 2001-2004, most of the descriptions in the plan and subsequent efforts in practice concentrate on efficiency in the administration. Although one of the directions of the plan focuses on the quality of decision-making, the objective of much of the practical work (e.g., GIS databases) was to achieve integration and support decision-making in the government itself, rather than seeking consultation outside the government. From this perspective, the work of e-government remains a top-down mechanism, which applies only to the government and is far from inviting the public into the process of decision-making.
Therefore, any improvement in the quality of decision-making can occur only in the administrative procedures of the government. This indicates that the e-government initiatives in Taiwan replicate similar faults to those experienced in other countries. Many authorities depict the nature of e-government as a set of digital processes for improving governmental effectiveness, 'with its dominant managerial discourse of cost cutting and efficiency' (Chadwick, 2003: 444) and pay limited attention to the issue of whether it is fundamentally appropriate to keep watch on the citizen's relations with government (Morison and Newman, 2001: 171).

It is understandable that the Taiwanese government has been keen to promote e-government. The government's desire essentially is to improve the convenience and efficiency of government services. Reviewing the content of e-government in Taiwan, the services available reflect the features and stages of information and transactions, as shown in Table 3.3 In both the *Mid-term E-government Implementation Plan* and the *Action Plan for E-government: 2001-2004*, the government planners have put forward many ideas, including online government catalogues and publications, online application services and transactions, and the integration of government agencies. The emergence of the one-stop service further extends its benefits, as indicated in the *Integrated E-government Entry Point for*
Taiwan. In such a plan for the government portal site, the government drew up a framework consisting of information retrieval, electronic service delivery and interactive communication. Since then, the content with regard to information searching and the online application service has covered substantially more items than were available on the former GSN website. Although the feature of interactive communication has become more elaborate, however, the items provided and arranged have in many cases become vague and unclear.

In essence, the establishment and promotion of e-government in Taiwan has improved the diffusion of government transactions and distribution of government information. The Taiwanese government has been keen to promote as many online items as possible, but the items are centred on information searching and online application. The portal site has been seen as a site for ‘information shopping’ only and has still not made much progress towards incorporating democracy-enhancing features.

The one-stop service seems a new concept, however; ‘it is the latest manifestation of one of the oldest preoccupations in the field of politics and public administration – the coordination of policymaking and administration’ (Pollitt, 2003: 36). Therefore, it
calls for cooperation, not simply addressing its users from a superior position, but rather requiring interaction between a government and its customers. The way that e-government works in Taiwan, unfortunately, is to make the government’s interests the priority and then mention the citizen afterwards. E-service has become the greatest concern for the authorities, who may fear that a ‘focus on e-service infrastructure would fundamentally change the citizen’s participation behaviour in public affairs’ (Lin, 2003: 2*). The services which the government at first offered were designed to suit not the citizens but the administrators, in streamlining administrative processes. The orientation of its activity tends toward G2G, even though this ‘reinventing government’ is claimed to be ‘customer-oriented’. Hence, I argue that the Taiwanese authorities are more inclined to use information technology to reorganise themselves than to incorporate more of the public in their operations. In other words, this seems to have been a managerial approach, for any bureaucracy runs its affairs primarily for its own benefit. Basically, this institution as it stands at present is a sign of governmental egotism, based on government needs.

Moreover, the government planners have simplified the concept of communication as one-way communication. They believe that dissemination of government news is a part of interactive communication. On the one hand, dissemination of government
information through e-government may do good for informing citizens. Yet, on the other, e-government is likely to become a new channel for propaganda. In the *Integrated E-government Entry Point for Taiwan*, the authorities set up many quantitative indicators to assess the service items, which are concentrated on the sections for information retrieval and electronic service delivery. They have set out many pragmatic goals for themselves in terms of the functioning of information search and online application service, but they have failed to draw a definitive picture of the work of interactive communication and instead have set up one which is full of rhetoric and empty claims. There is an almost complete blank with regard to assessing the function of interactive communication. Furthermore, there are no quantitative indicators evaluating the effectiveness of the communicated items. At least, it seems that deliberation and dialogue, as prized by the advocates of ‘strong democracy’ receive little attention here. The feature of interactive communication is also inadequately and ineffectively managed: its management can only be described as haphazard.

For example, email is commonly considered to be the easiest and quickest method of contact, yet one of the senior Taiwanese officials in e-government admitted that the normal procedure in the portal site for dealing with an email request takes 3-5 days
(Lee, RDEC Interview, December 2002*). If the authority takes so long to answer a citizen's question, is it not expecting too much to suppose that citizens' comments can make much, or indeed any difference? Another example is the online discussion forum. Many government bodies have launched online discussions, yet most of them have either been closed or left with only an open email box. The reasons that the authorities gave were that too many personal attacks were posted and there were too few moderators to control the online discussion forums. One further example to show the government's reluctance in this venture is that of online polls. The authorities refused to collect public opinions on public issues in online polls, because anonymous and repeat voting would distort the results (Lin, 2003: 13*).

Obviously, e-government in Taiwan, far from serving as a two-way channel of communication, has had the effect of threatening to obstruct the desire of citizens to communicate with the government. It may be expecting too much to want online democratic features to have any substantial impact later on the offline mechanisms of policy making. If interactive communication is limited merely to the distribution of government information, e-government turns into nothing more than an alternative channel for propaganda.
3.7. Conclusions

As Richard (1999) says, in any model of a healthy civil society the citizen is not only a consumer in the product and service delivery chain, but also a partner in governance, a node in this network of lateral connections (Richard, 1999: 73). The Taiwanese government, however, regards the public as passive clients of public policies, consuming government services and accepting government information, rather than active contributors who should provide feedback and monitor the process of decision-making. Although recently the relevant initiatives of e-government have extended the concern from creating a holistic government to creating a holistic society based on the application of information, the government remains at the stage of seeking the greatest profit and building an infrastructure around its own needs. They intended to raise people’s competence in the use of IT in the information age, so their services and information can be expected to have reached a certain number of people. The IT literacy and information superhighway, of course, can substantially support the features of e-government. E-government can advance government services and distribute government information, yet it needs official encouragement to become a communicative platform between the government and the public. In particular, the effectiveness of interactive communication involves the intentions of governments and the perceptions of the governed.
As a matter of fact, the creation of e-government is not a privilege belonging exclusively to so-called ‘democratic’ countries. The performance of e-government in some communist, semi-authoritarian and authoritarian counties has gradually won global attention. Singapore, for example, has been ranked within the top 10 e-governments worldwide since 2001 and even reached the highest rank in 2003, according to international assessments (WMRC, 2001; Centre for Public Policy, 2002-2004). Another example is China, which has made a big advance in the same assessment. No government would take any action against such an advance. Among most of the countries which have developed some level of e-government, information and transactions have become common features. Different political systems, however, would emphasise different features of government services.

Kalathil and Boas (2003) explored the impact of the Internet on eight non-democratic countries, including two semi-authoritarian ones (Egypt and Singapore) and six wholly authoritarian ones (Burma, China, Cuba, Saudi Arabia, the United Arab Emirates and Vietnam). They suggest that in the last group the Internet serves less as a catalyst for democratisation and more as a tool to fortify the regime by serving state-defined goals/priorities. Fountain (2001) points out that controversy inevitably arises when authoritarian regimes adopt the Internet. ‘The Internet threatens the
domination by the state over information and communication but at the same time, paradoxically, serves as an instrument of consummate state surveillance and control over society' (Fountain, 2001: 3); the central government of the People's Republic of China, for example, treats networked computing as an instrument of social control and surveillance (ibid, 33). Similar arguments can be found in the work of Hughes and Wacker (2003). They remark that China enjoys a high degree of success in monitoring electronic information and even using it as means of control and influence. If both democratic and non-democratic countries are able to employ continually advancing technologies to enhance government websites, the only difference between these and the greater number of systems provided with similar services in democratic countries would be the feature of communication, or rather, the different nature of the political participation. More importantly, the effectiveness of e-government depends on both actors' attitudes to information, service and interactive communication by this means.

Some people optimistically expect that the application of ICTs and the creation of e-government will bring many benefits for democracy. The concept of e-democracy is associated with efforts to broaden political participation by enabling citizens to connect with one another and with their representatives, via new information and
communication technologies (Hansard Society, 2003). Much of the rhetoric about the potential for ‘strong democracy’, relying on the ability of interactive ICTs, has boasted of its enhancement of representative democracy and its approach to the dream of direct democracy. The use of ICTs could lead to a fundamental reinvention of government, involving a shift from representative government to a more participatory democracy (Raab et al, 1996: 289; Hague and Loader, 1999:13). Undoubtedly, the choice to use e-government links the public and the government together.

Even so, however, human beings are defined as political beings and one can only be fully human if one has the ability to participate in political life. The structures of public administration have to accommodate this ability, for it makes administrators once more only citizens among their peers and they need to assume the role of facilitators for the participative action of everyone else. It is clear, then, that e-government in Taiwan has to incorporate its citizens more thoroughly into its regular policy-making process. This perspective goes beyond the simple electronic service delivery and formal information provision promoted by the Taiwanese government; it should seek to use ICT to integrate citizen-customer feedback into the process of re-engineering the public service itself.
As West indicates, the integration of technology into political life is mediated by institutional arrangements, budget limitations, group conflicts, cultural patterns and individual beliefs and behaviours. Many factors constrain bureaucracy's ability to remake itself (West, 2004: 24). E-government cannot be satisfied only with some process for reinventing government. Rather, citizens' participation should reflect the democratic values which accompany e-government. This, of course, involves turning informed people into active citizens, since being a citizen is not merely a matter of being well informed. The main requirement for being an active citizen is the existence of an information channel and the competence to access public affairs. E-government can offer a channel for citizens, but it cannot decide how they should proceed. Users may be informed but they still may not spontaneously become active citizens. Changing the perceptions of e-government users is not easy, but in the long term it will be necessary.
CHAPTER 4

CHOICES FOR THE GOVERNED:

THE PUBLIC USE OF E-GOVERNMENT

4.1. Introduction

The process of being designed and used transforms information technologies. As Norris remarks, 'governments and civic societies are in the process of adapting to information technologies, and the structure of political opportunities' (Norris, 2001: 95). If so, the Internet will only strengthen democracy if it expands opportunities for political participation (ibid: 103). This is one of the main incentives for many democratic countries to develop e-government as an interface between citizens and the government. Undoubtedly, a government has its own intentions in using e-government. In Building the Virtual State, Fountain asserts that 'new technologies are enacted - made sense of, designed and used (when they are used) through the mediation of existing organisational and institutional arrangements with their own internal logics or tendencies' (Fountain, 2002: 12). Furthermore, the recent focus of
e-government leans heavily toward a 'customer-centric' vision throughout government agencies, which is commonly seen as the iteration of a long line of government efforts for reform. If the dominant approach of e-government is customer-oriented, as claimed in the e-government initiatives of many governments, then e-government is designed to meet customers' needs and ought to cater for their preferences. The public's participation and patterns of use must be taken into account.

In a democratic society, freedom of information and communication is essential. Raymond Williams eloquently elaborates on the core rights of citizenship and the basic structure of communication. He remarks that the basic rights of citizens to speak and hear are linked to the power to transmit and receive information (Williams, 1963; Sparks, 1993; Friedland, 1996: 186). The 'new citizenship' proposed by Rimmerman (1997) associates citizenship more with the broader forms of political participation, such as grassroots mobilization, community participation and the Internet, than the traditional ones. However, the emergence of a virtual political system influenced by the new media, notably the Internet, has become a popular phenomenon. Can this create active citizenship and civic engagement, as Norris hopes (2000: 95)?
From the establishment of its information infrastructure and more recently its ‘one-stop service’, the Taiwanese government is highlighting the change in the administration and the improved efficiency within the public sector, as discussed in the previous chapter. This is a sign of modernisation. However, as the Taiwanese government increases the number of items and comprehensiveness of its services by way of e-government, it seems to be more significant and necessary to examine the impact of these services by studying how people actually use them and adapt to them. This chapter thus focuses on the interests of the Taiwanese citizens at all levels and examines their practical participation in social and political life through the use of e-government.

This chapter aims to identify the extent to which public services in e-government are being used and whether these services are responding to the needs and expectations of citizens in Taiwan. What are the patterns of use made of e-government by the Taiwanese people? Does the public show as much enthusiasm for e-government as the authority does? More importantly, can the public use of e-government embody the underlying values of democracy? In answering these questions, I have divided this chapter into several sections. I firstly explain the factors which affect the public use of e-government, followed by a social profile of the online environment in
Taiwan, including the availability of Internet infrastructure in context and the characteristics of Internet users. In the latter, in particular, the data of online demographics and online activity are provided as background in order to clarify the use of e-government. Next, a discussion of the social profile of e-government users in Taiwan includes a section on the accessibility of e-government in context and another on the characteristics of e-government users. I begin by describing the circumstances in which people access e-government at different times and go on to discuss the demographics of e-government, the content of what the users do in e-government sessions and finally their satisfaction or otherwise with the services available on e-government. I then move on ask whether e-government can serve democracy and conclude that, for the users, e-government is in fact used mostly for acquiring information. The public shows enthusiasm for e-government, but only of a limited scope. Therefore, the expansion into democratic participation has not occurred yet.

4.2. People's Choices in Using E-government

As shown in Table 3.1 of the previous chapter, the performance of e-government can be broadly divided into internal and external aspects. Assessing the use of e-government, of course, involves two main user groups: government agencies
(including government employees) and the public (including private businesses). The internal aspect is closely linked to the ‘back office’, which emphasises intranet use. Much of the research uses the perspective of the supply side in the analysis of e-government offerings. In the field of public administration, in particular, many scholars have elaborated the use of intranets by government employees, including their organizational structures and knowledge management (Willcocks, 1994; Brown, 1999; Anttiroiko, 2002; Moon, 2002; Edmiston, 2002; Holden et al, 2003) and greater emphasis should now be placed on marketing the government portal to citizens and training government workers in its strategic use (Detlor and Finn, 2002: 106). If the government is a business with the purpose of serving citizens as customers, it is necessary to look at the output and adopt the perspective of the demand side. How people perceive the content of e-government services and the presence of government websites are crucial in determining how they use e-government.

The primary condition for the public access and use of e-government is the availability of the Internet. Without the Internet infrastructure, e-government does not exist. In many studies concerning the Internet access and use, the digital divide varies accord to social-demographic factors, such as age, race, gender and education,
among others (Wyatt et al, 2002; Warschauer, 2003). In the report by the OECD (2003), the digital divide was listed as one of the important external barriers to e-government. The social-demographic factors related to the Internet use and access also apply to e-government studies. Thomas and Streib (2003) indicate that white Internet users are more likely to engage in e-government, while Howard et al (2001) suggest that people's educational background predicts the probability of their using the Internet for financial, political or government information. Thus, in order to discuss the public use of e-government, the demographics of the Internet and the data on e-government cannot be excluded. The demographics give a general picture of who those e-government users are.

Once people are capable of accessing the Internet, the next questions are where they go online and what they do there. The 'use' corresponds to the 'need' that the technology aims to fulfill, and the need is in turn formulated by particular interests (Salter, 2004: 186). Studying the use of the Internet reveals not only the users' needs but also their interests. Plenty of studies on the use of the Internet indicate that many people use it mainly for social and occupational interaction and the personal needs associated with their everyday lives. To be precise, the Internet has become a social and occupational medium and also a shopping and entertainment medium (Jennings
and Zeitner, 2003: 312). For example, in his discussion of a US survey of Internet use, Winner (2000) has discovered that the most common uses are for news, entertainment and health information.

The political use of the Internet is not as popular as the other social uses mentioned above. For example, a study of Internet users and networks in Amsterdam indicates that political websites received fewer hits than recreational sites (Brants et al, 1996). Employing the Internet for political purposes, especially for civic engagement, has not so far had any very substantial effects. Numerous speculations have emerged about the impact of the Internet on the civic and political participation of the populace (Norris, 1999; Tambini, 1999; Katz and Rice, 2002). Most of these speculations are based on the argument about the inequity of social resources, which to some extent emerges from the demographics. Moreover, if one focuses on the individuals, their personal political motivation, including interests, knowledge and confidence, is expected to prove important in determining whether or not they access the Internet and use it to seek out political resources (Norris, 2001: 220). This kind of perspective echoes the ‘uses and gratifications’ theory in media studies, which suggests what the motives are for media choice and the perceived uses and gratifications of media behaviour. The users can make conscious and motivated
choice between the channels and content on offer (McQuail, 1999: 296, 318). Thus, the need for prior predisposition and experience of the utility, to some extent, influence the access and use of the political resources available on the Internet. For instance, a comparative study of two epochs of civic engagement, before (1982) and after (1997) when the Internet was introduced in the United States, demonstrates that more actively engaged individuals have incorporated the Internet into their political repertories (Jennings and Zeitner, 2003: 330). Therefore, opportunities for participation and engagement on the Internet are likely to be available for the population who is most likely to want to use them. In this regard, the rise of e-government seems to attract those who are already most predisposed toward civic engagement and to reinforce the patterns of political participation.

E-government should be open to all the public, as traditional government services are. Apart from the availability of social resources, people are of two kinds as regards their motivation on the Internet: those who are interested in accessing political affairs and who are interested in commodities and socialisation. Although these groups may overlap, e-government is in principle designed to attract as many users as possible and is not confined to any specific group. However, the motivation affects the
websites which are accessed and used by the public. Regarding this point, do Taiwan’s Internet users show sufficient motivation to access government websites?

Motivation can be stimulated by the interface which people experience. The public perception of and attitude towards e-government can be quickly built up through its experience of using government websites. Thus, the presence of a government website is enough to be an important mediator between the government and the public. Many organisations evaluate the performance of e-government on the basis of whether or not there is a government website to access (cf. Chapter 1, pp.46-48). As the OECD indicates, however, current studies tend to focus on the breadth of the online service (i.e., the number of services provided); its span (i.e., the customer target group to which the online service is delivered); (and to a lesser extent) the quality of the online service (i.e., the extent to which online services achieve their stated objectives) (OECD, 2003a: 137). With regard to the quality of e-government services, citizen satisfaction is the aspect most often assessed. This frequent assessment perhaps reflects the fact that customers’ expectations and habits are evolving rapidly in a changing service environment. As an eEurope survey indicates, the most important factors are the overall satisfaction and whether or not the users’ expectations are met (eEurope, 2003: 14).
In addition, it seems more appropriate to compare a government’s online activity with its role in the real world. Norris suggests that ‘government websites should be evaluated in terms of the quality and effectiveness of their informational and communication functions’ (Norris, 2001: 129). Therefore, e-government is not concerned with whether a single item among e-services is easy to use. Moreover, the degree to which and the resources by which the users are able to achieve their intention can affect whether or not the public continue to use e-government.

Therefore, online environment and demographics condition the extent to which and the ways in which people perceive e-government services and their online activities. People’s satisfaction can then identify the improvements which meet the users’ needs by making e-government services more accessible and effective and ideally reinforce the users’ willingness to use e-government. In the following sections, I shall refer to more empirical data on the circumstances of the online environment and the profile of e-government users in Taiwan.
4.3. Social Profile of the Online Community in Taiwan

4.3.1. Availability of Internet Infrastructure in Context

In today's world, the Internet has gradually dominated many lifestyles; it appears to have spread remarkably and unconsciously penetrated into many people's daily lives. The use of the Internet nowadays seems very different from what it was in its early days, the late 1960s. From an initially defence purpose (during its ARPA years) and an earlier experimental network (when it was called ARPANET), via its use as an academic resource (the USENET years), to its present status as a general communication and transaction medium, it remained much the same until the mid-1990s, when it was decisively changed by commercial applications.

In Taiwan, the information infrastructure was initially set up in the form of a campus network – the 'Taiwan Academic Network' (TANet) – primarily for the exchange of teaching and research resources and cooperation between one academic and another. Thereafter it spread rapidly among businesses, government bodies and personal users. The service which it provides and the population which it reaches account for much of the exuberant rise of the Internet. Firstly, the most popular service it offers is the Bulletin Board System (BBS), which allows a specific group of people to share their
interests, tastes, feelings or values mainly through writing. Before its connection through TANet, in the early stages of the BBS, the types of BBS were private, most users were amateur computer users and the discussions in the BBS concentrated on technical advice for software and hardware. However, once the first BBS was attached to TANet in 1992 talk was no longer limited to the computer field but covered wider aspects of life. As a primary study on the development of the Internet in Taiwan indicates, the BBS has the biggest influence of a number of popular Internet services (Sun, 1996*). The users, most of them university students, not only relied on the BBS as their information exchange centres but also used Gopher, the Talnet, the USENET news, email and the embryonic WWW as their communication platforms.

Because the original TANet was a free service built into universities, significantly, the TANet fosters the biggest population of Internet users. When the WWW began operation in 1996, the users of BBS, mainly university students, quickly but not completely transferred to it. Before the task force of NII changed direction and boosted Internet use among all levels of society, the activities centring on the university campus were for many people the most intensive. According to an early
analysis of public communication on the Internet, ‘among university students, the
Internet has become the most important medium to rely on’ (Huang, 1996*).

The TANet is a non-profit making campus network, while Chunghwa Telecom Co
Ltd, a public-private partnership, provided the first profit-making network, the
‘Hinet’ in March 1994. All computer users once they applied the Hinet could join the
Internet network and its use was no longer limited to the campus. Meanwhile, a third
network, the ‘Seednet’, appeared but was in fact in process of restructuring. It was at
first financially supported by the government. Yet, even though the government
budget was cut off for a number of reasons in 1995, the Seednet established its own
company, ‘Digital United Inc’ (but still commonly known as the ‘Seednet’) and then
became Taiwan’s first private sector business for Internet activities. Hitherto the
TANet, the Hinet and the Seednet had almost taken over the whole market for the
Internet in Taiwan. Since 1994, through the services provided by Hinet and then
Seednet, followed by private companies, people could surf the Internet at home, at
the work place and in other public places and enjoy its benefits. This also implies
that the Internet has become yet one more customer commodity in people’s lives in
Taiwan. The Internet has attracted business interests and its uses have been extended.
The government reached its target of attracting three million users to the Internet by 1999 and Internet penetration in Taiwan has grown incrementally ever since. According to the figures released from the FIND agency of the Advanced e-Commerce Institute (ACI-FIND), the Institute for the Information Industry under the sponsorship of the Department of Industrial Technology in the Ministry of Economic Affairs, between 1996 and 1999 the number of Internet users in Taiwan increased from 440 thousand to 4.02 million, while the Internet penetration of households increased from 2 to 18 per cent. Overall, between June 1996 and June 2002, the Internet penetration of households in the Taiwanese population dramatically increased from less than 3 per cent to 36 per cent (ACI-FIND, 2002: 4*). Moreover, another set of national statistics, compiled by the Department of Statistics, in the Ministry of Transportation, shows that the Internet penetration of households in Taiwan was 20.1 per cent by January 1999, 37.5 per cent by March 2001 and 48.6 per cent by March 2003 (Department of Statistics, 1999*; 2001*; 2003*). Because different official departments in the government use different methods to investigate the Internet population, there is admittedly a slight difference between these figures. Nevertheless, it is clear that the number of Internet users in Taiwan is constantly increasing.
4.3.2. Characteristics of Internet Users

The concerns about differentiated access in the online demographics may fade away over time with the assistance of government initiatives. However, the way in which users perceive the Internet, which to some extent determines how they use it, varies according to their online interests.

4.3.2.1. Online Demographics

In the process of popularizing the Internet in Taiwan, however, the data tend to indicate that the Internet users are restricted to a limited circle. Before the mid-1990s, the users who accessed the Internet were enthusiasts for technology and little else. However, since the privatisation of ISPs and the networking of TANet around the mid-1990s, the circle of Internet users rapidly extended, but still the groups were mainly drawn from the younger generation: people aged 20-30 (57 per cent in 1996; 49 per cent in 1998), male (87 per cent in 1996; 67 per cent in 1998) and university/college-educated (69.6 per cent in 1996; 70 per cent in 1998). The official data conclude that between 1996 and 1998 most of the users had high socioeconomic status (ACI-FIND, 1998*).
Although Internet penetration rose in 1999, significantly, the few surveys conducted by the private sector indicate that the main user groups were composed of students and young professionals with a university degree or above (Yam, 1999: 8-14*; CW Group, 2000: 21-22*). The official data also map a similar picture, which suggests that the Taiwanese Internet users remain prevailingly young, university-educated men (ACI-FIND, 2001: 16*; 2002a*; 2003a*; 2004a*; Department of Statistics, 1999*; 2001*; 2003*). If we rule out ethnic differences, the characteristics of Internet users in Taiwan are those of stereotypical users in most Western countries: they are young, white, highly-educated men (Norris, 2001; Wyatt et al, 2002: 27).

4.3.2.2. Online Activity

The high percentage of Internet penetration underlines the mature condition of online access. The exploration of online activities not only reflects the users' online interests but also presents their perception of the Internet. For the most part, the Taiwanese use the Internet as a tool to acquire information. The most frequent online activity is 'browsing'. The evidence can be found in surveys from both the private and public sectors. According to a few private institutions, 'browsing' and 'emailing' are always the two most popular online activities (Yam, 1999: 8-14*; CW Group, 2000: 21-22*). With respect to the results from the public sector, what Internet users most often do
online, as the official documents confirm, remains ‘browsing’. The national statistics indicate that around 80 per cent of Taiwanese Internet users give ‘browsing’ as their main purpose and their major activity in using the Internet (80.8 per cent in 1999, 81.3 per cent in 2001 and 79.7 per cent in 2003). In 1999, the second most popular activity was ‘using online databases’ while in 2001 and 2003 it was ‘emailing’ (see Table 4.1) (Department of Statistics, 1999*; 2001*; 2003*). Again, recent figures demonstrate that these online activities have been absorbed as part of the users’ everyday lives. Another official figure shows that the percentage of ‘browsing’ in 2004 increased by 8 per cent from the previous year. ‘Browsing for information’ remains the most popular online activity (80 per cent in 2003 and 88 per cent in 2004), followed by ‘emailing’ (77 per cent in 2003 and 73 per cent in 2004). However, other online activities, such as downloading and uploading files, exchanging online instant messages and playing online games, have steadily grown more popular over the whole online community (see Table 4.2). Significantly, two-way interaction will play the leading role among online activities in the near future (ACI-FIND, 2003a*; 2004a*). The online status of ‘browsing’ may not be challenged at once, but the characteristic of ‘interactivity’ may be added and this in turn will be closely integrated into the users’ social lives. However, such popular
online activities as ‘online instant messaging’ and ‘online games’ are engaged in for sociability and entertainment.

Table 4.1 User Online Activity in Taiwan, 1999-2003

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<tr>
<td>Browsing (information/news)</td>
<td>80.8</td>
<td>81.3</td>
<td>79.7</td>
</tr>
<tr>
<td>Emailing</td>
<td>21.7</td>
<td>40.9</td>
<td>36.9</td>
</tr>
<tr>
<td>Playing online games/making friends online</td>
<td>26.2</td>
<td>28.1</td>
<td>27.8</td>
</tr>
<tr>
<td>Using online databases</td>
<td>27.6</td>
<td>24.1</td>
<td>5.9</td>
</tr>
<tr>
<td>Managing official work</td>
<td>16.0</td>
<td>13.1</td>
<td>16.3</td>
</tr>
<tr>
<td>Distance learning</td>
<td>2.8</td>
<td>3.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Online shopping</td>
<td>2.8</td>
<td>2.8</td>
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</tr>
<tr>
<td>Job hunting</td>
<td>--</td>
<td>1.8</td>
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Note: Multiple responses were possible (adding up to more than 100 per cent).

Hargittai suggests a few directions for future research on Internet access and use: but, as she says, ‘digital technologies for computer-mediated communication with other individuals can be very different from their use for information retrieval of various types’ (Hargittai, 2004: 141). Even though ‘browsing for information’ is the most popular use for the Internet, it is interesting to consider what kind of information Internet users are looking for and what their interest in it is. Moreover, the general use of the Internet in Taiwan obviously shows its effects on sociability. People have gradually come to rely on the Internet as an alternative channel for communicating
with others. Yet the specific question to ask is ‘What different types of communication are used for these different purposes?’ Is the use of the Internet for communication restricted to individual communication in the interests of sociability alone (i.e., to keep in touch with a social circle) and less likely for the purposes of political communication (i.e., for contacting the government and expressing one’s opinions)?

4.4. Social Profile of E-government in Taiwan

4.4.1. Accessibility of E-government in Context

As described in the last chapter on the information infrastructure and the government’s initiatives, for the authorities the concept of e-government in Taiwan was initially equivalent to the setting up of government websites. It was not until 2002 that the implementation of e-government focused on a ‘one-stop service’ (i.e., a government portal site) concurrently with an increase in government websites.

In the surveys on e-government access and use, the earlier results show a general picture of government websites. There is no standard type of government website investigated, from either central government or local government. As Internet penetration rose since 1999, the percentage of Internet users who visited a
government website increased by 6 per cent or so every other year. Thus, more than 50 per cent (53.5 per cent in 1999, 59.7 per cent in 2001 and 66.8 per cent in 2003) of Taiwanese Internet users have at some time accessed a government website (Department of Statistics, 1999*; 2001*; 2003*). It should be noted that no particular government website was mentioned when these e-government users were investigated.

However, the effectiveness of e-government has apparently not turned out as the Taiwanese government calculated. According to The Year Book of Internet Development and Application in Taiwan (2001), neither government websites nor the government portal site is prominent in terms of the whole flow rate or the website reach rate. Firstly, the amount of whole flow rate (i.e., the total number of pages viewed) of government websites occupies 1.71 per cent of all the online pages viewed between January and August 2001. In other words, the amount is only one-seventh of that for the homepage of ‘Yahoo! Taiwan’, which had the biggest flow rate of all websites at the time (ACI-FIND, 2001: 25*). Secondly, the ACI-FIND takes the definition of a website reach rate from iRate, a private company which specialises in Internet ratings. A ‘website reach rate’ is found by dividing the whole Internet population by the number of visitors to one website within a given
survey period. The reach rate of the government portal site is 1.68 per cent, which ranks only 24th amongst all government websites (ACI-FIND, 2001: 27*). This is unusual, because the portal site would normally be expected to have a much higher reach rate than the other websites.

The rate of accessing e-government in Taiwan has not significantly increased over time. Taylor Nelson Sofres, one of the respected international companies specialising in various types of survey, investigated the penetration of e-government in 31 countries during July and September 2002. The findings indicate that 30 per cent of the Internet users in Taiwan accessed e-government in this period, which puts it 14th among the nations surveyed (Taylor Nelson Sofres, 2002; cited by ACI-FIND, 2002b*). In the same year, the Taiwanese government was intensely proud of itself for having been assessed as the best of 198 nations in the performance of e-government, according to another international assessment (Centre for Public Policy, Brown University, 2002). But obviously, public access to e-government in Taiwan lags far behind the access to other web-sites. Furthermore, in 2003, the average penetration of e-government worldwide (32 countries) was 30 per cent, while the result in Taiwan (35 per cent) was somewhat higher. But its ranking has dropped a little, to 16th among the countries surveyed (ACI-FIND, 2003b*).
The local surveys present an equally low participation rate for e-government. In its investigation into the use of online activities ACI-FIND discovered that only 12 per cent of the Internet users in Taiwan claimed to have accessed and used e-government in both 2003 and 2004 (see Table 4.2). However, the most popular kind of online activity (i.e., browsing) was carried out by more than 80 per cent of viewers at the time. In the context of overall online use, the Taiwanese public's access to e-government and the use made of its services are not particularly striking.

<table>
<thead>
<tr>
<th>Table 4.2 User Online Activity in Taiwan, 2003-2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>(%) of users reporting activity</td>
</tr>
<tr>
<td>August 2003 (N = 5,137)</td>
</tr>
<tr>
<td>August 2004 (N = 4,086)</td>
</tr>
<tr>
<td>Browsing (information/news)</td>
</tr>
<tr>
<td>Emailing</td>
</tr>
<tr>
<td>Downloading and uploading files</td>
</tr>
<tr>
<td>Playing online games</td>
</tr>
<tr>
<td>Exchanging online instant messages (e.g., MSN &amp; ICQ)</td>
</tr>
<tr>
<td>Making friends online/Internet relay chat (IRC)</td>
</tr>
<tr>
<td>Watching online clips</td>
</tr>
<tr>
<td>Online shopping</td>
</tr>
<tr>
<td>Using e-government services</td>
</tr>
<tr>
<td>Online auction (e.g., eBay)</td>
</tr>
<tr>
<td>Online banking</td>
</tr>
<tr>
<td>Paying bills online</td>
</tr>
<tr>
<td>Internet telephoning</td>
</tr>
</tbody>
</table>


*Note: Multiple responses were possible (adding up to more than 100 per cent).*
The government re-launched the portal site (named 'My E-government') and formally introduced it to the public in March 2002. However, very few Internet users have had experience of visiting this portal site, even though it has run for two years. It is commonly agreed that the content and the service offered by different government websites are varied. Internet users normally have to visit different websites to find what they need. If all the resources could be covered in the same website, users could save time and energy. In principle, the concept of a one-stop service where different online resources are integrated makes sense. Yet the government portal site has not become the 'main entrance' of government businesses. Even though there are numerous government websites, it seems that no portal site among them possesses the characteristics needed to attract Internet users.

According to a survey of public opinion on e-government issues in October 2004, conducted by the e-government authority (Research, Development, and Evaluation Commission), 57 per cent of the public have accessed e-government for different purposes. However, only 20 per cent of the public recognised the appearance of the portal site, while only 27 per cent of the total had ever accessed this website (RDEC, 2004*, cited by ACI-FIND, 2004b*). This implies that the public may access different kinds of e-government, but when they do they may not be interested in
choosing the portal site as their priority. For example, if Internet users want to order rail tickets, they can go straight to the national railway website without using the external links to it on the portal site. If they do not know the website address of the national railway, they can even use the numerous powerful commercial search engines, such as Google or Yahoo, to find the relevant information. This being so, what is the point of the e-government niche? Amongst so many websites, can the government’s website ever be as attractive to Internet users as a general website? Moreover, is the one-stop service attractive enough to Internet users? The government websites thus have to compete with powerful commercial websites not only at the operational interface, but also in the effectiveness of their procedures. Hence, the government websites have to meet the users’ requirements as closely as possible.

4.4.2. Characteristics of E-government Users

4.4.2.1 Demographics of E-government

In the early stage, the concept of e-government was generally confined to government websites. The designs for e-government cold therefore draw only on the broad demographics based on the national statistics (e.g., from the Department of Statistics and the ACI-FIND), since they were the only ones available for online
access and general Internet use. It is agreed that most of the Taiwanese Internet users are young, highly-educated men. Following this logic, in general, e-government users must fall within these demographics. According to several surveys conducted by the Department of Statistics, the major demographics on e-government are that the users are: male, aged 20-40, university-educated and in professions related to the public sector (Department of Statistics, 1999*; 2001*; 2003*). In addition, the ACI-FIND adds the aspects of annual income and educational background. The results show that the annual incomes of e-government users in 2001 were 16 per cent higher than the average for Taiwan. The percentage of e-government users with university degrees or above is much higher (66 per cent) than among average online users. It can be inferred that the demographic structure of e-government users has a higher socioeconomic status than ordinary online users have (ACI-FIND, 2001: 30*).

However, different government websites have various characteristics due to the nature of their hierarchy (i.e., central vs. local) and their area of concern (e.g., taxation, rail and information services). The content and the service found in different government websites vary, while the Internet users would normally visit different websites to find what they need. As a result, it may at first be concluded that the demographic characteristics of e-government are based on the stereotype of
online users as a whole, although the data from the ACI-FIND demonstrate that there is a slight demographic difference between e-government users and online users as a whole. In theory, each website should develop its unique appeal to its own target users. Because of the individual differences of the government websites in their nature and design, the early national surveys had difficulties in mapping the definite demographics of e-government.

After the government portal site was inaugurated, the authority of e-government conducted an online survey, displayed on its homepage, with reference to the use of the portal site in 2003. The results show that the gender and educational background of users are not unexpected: users were mainly male and had a university/college education. Moreover, the national statistics indicate that the tendency in the average age of online users as a whole is inclined to go down over time, particularly among those younger than 20 (Department of Statistics, 2003*). However, the users' age on the government portal site is greater than that of the online communities as a whole in the same year. In the survey taken in March 2003, the biggest user group falls into the age group of 20-29 (36.6 per cent), while in September 2003, it was those between 30 and 39 (32.5 per cent) who visited the portal site most. Furthermore, referring to their occupations, it was students (18.6 per cent in March and 11.8 per
cent in September) and civil servants (10.8 per cent in March and 35.9 per cent in September) who tended to access the portal site most often (RDEC, 2003g*; 2003h*).

Significantly, the proportion of civil servants has dramatically increased, to the level where they have recently become the major users of the portal site. Therefore, it can be concluded that most of the users of the government portal site are: adults (aged 20-40), university-educated, male civil servants and students.

4.4.2.2. Activity of E-government Users

For the most part, it can be inferred that the Taiwanese Internet users who visit e-government do so to browse for information. In 1999 and 2001, the percentage of e-government users 'browsing for information' reached nearly 90 per cent of all activities (see Table 4.3). The rate at which the users joined in other activities was always lower than 20 per cent. This adds up to more than 100 per cent because some respondents listed more than one activity. The second most popular activity changed from 'academic activities' in 1999 and 'ordering tickets' in 2001 to 'requesting public services' in 2003 (Department of Statistics, 1999*; 2001*; 2003*). Therefore, these respondents used only specific service items from e-governments.
<table>
<thead>
<tr>
<th>Activity</th>
<th>January 1999 (N = 2,129)</th>
<th>March 2001 (N = 1,894)</th>
<th>March 2003 (N = 2,060)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browsing (information/news)</td>
<td>90.0</td>
<td>89.6</td>
<td>81.0</td>
</tr>
<tr>
<td>Ordering tickets</td>
<td>--</td>
<td>15.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Academic activities</td>
<td>15.8</td>
<td>13.2</td>
<td>10.3</td>
</tr>
<tr>
<td>Requesting public services</td>
<td>8.4</td>
<td>8.9</td>
<td>16.8</td>
</tr>
<tr>
<td>Job hunting</td>
<td>12.0</td>
<td>7.7</td>
<td>2.4</td>
</tr>
<tr>
<td>Voicing opinions</td>
<td>6.9</td>
<td>5.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Public bidding</td>
<td>3.4</td>
<td>5.3</td>
<td>6.0</td>
</tr>
<tr>
<td>Others</td>
<td>3.7</td>
<td>1.8</td>
<td>0.8</td>
</tr>
</tbody>
</table>


**Note:** Multiple responses were possible (adding up to more than 100 per cent).

In *A Study of Participation in Public Affairs amongst Taiwanese Internet Users*, Hu (2001) indicates that, although more than 70 per cent of Internet users had heard of e-government, less than 20 per cent of the service items were being used. Amongst the services being used, 'browsing for information' is the most frequent item. Moreover, Internet users browsing for information on the government websites concentrate on taxation, transportation and health themes (Hu, 2001: 77*). Referring to the 'website reach rate' assessed by 'iRate' during January and August in the same year, the national railway website is the most popular government website, reaching 10.49 per cent. This is equivalent to 336.83 out of every 1000 people visiting this website. In addition, of the top 10 government websites according to the reach rate, two were directly related to taxation. These websites always retain a stable reach rate.
The rest of the government websites, however, vary in different periods, depending on whether major news events have occurred (ACI-FIND, 2001: 27*).

It seems, furthermore, that the use made of the services available on government websites has not significantly changed with time. In a study on the assessment of citizen online use and the digital divide, under the sponsorship of the RDEC, Tseng et al (2003) indicate that, amongst those who visited government websites, the major pattern of use is 'browsing for information', according to 41.9 per cent of the respondents. The next most popular use of these websites is 'ordering rail tickets on the national rail website', the choice of 41.4 per cent of respondents (Tseng et al, 2003: 19). Furthermore, the RDEC (2004) itself also discovers similar results. The most frequent use for e-government is 'buying rail tickets' (53 per cent), followed by 'making online appointments with a GP' (45 per cent) and by 'online tax filling' (42 per cent) (cited by ACI-FIND, 2004b*). Therefore, in general, Internet users tend to visit government websites in order to browse for information on taxation, transportation and health issues. Furthermore, the service items they have tended to use concentrate on these three themes.
As discussed in the previous chapter, the government is inclined to emphasise the use of government services and distribution of government information rather than interactive communication on e-government. The users' activities on the government portal site do not exceed the government's expectations. A study of the users' behaviours on the government portal site perhaps presents a different picture from their use of other websites, which are assessed according to visitors' track records, such as the pages viewed, the website hits, the time and duration of their stay, as well as the frequency of their visits. This study is the first analysis to look for a pattern of use of the government portal site since the Taiwanese government officially launched the government portal site (My E-government) in March 2002. The research reveals a few interesting points. First, the users always access the portal site in normal office hours, on weekdays from 9 am to 5 pm. Second, from a cross-analysis of the visitors' duration of stay and the number of pages viewed, it emerges that more than 80 per cent of visitors tend to stay briefly and browse only a page or two. The average duration of stay in the portal site is less than 1 minute. This may be because visitors do not find the service and information they need there and leave immediately. Thus, there may be a difference between the users' needs and the content provided by the portal site. Third, the users who visited the portal site not only stay briefly but also like browsing the 'shallow', 'short' and 'immediate' images more than any other
services. The popular pages are centred on the real-time photos taken by the webcams set up in a number of tourist attractions. The real-time service is the most popular function (Chen and Lin, 2002: 26-38*).

Significantly, e-government has yet not been proved successful, because the work of e-government will need more time to prove itself. The results of two surveys of Taiwanese people’s satisfaction with public services proved very interesting. The RDEC used two different methods to present the activities on the portal site. Firstly, it conducted two Surveys of People’s Satisfaction with Public Services in March and September 2003, using stratified random sampling by telephone interview. From the answers given by the users who had experience of the ‘one-stop service’, it appears that ‘browsing for information’ was still the most popular online activity, followed by ‘searching online application information and downloading forms’. ‘Voicing opinions’ was the least popular function with the visitors to the portal site (see Table 4.4 below).
Table 4.4 User Activity on the Taiwanese Government Portal Site, 2003

<table>
<thead>
<tr>
<th>(% of users reporting activity)</th>
<th>March 2003 (N = 36)</th>
<th>September 2003 (N = 46)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browsing (information/news)</td>
<td>39.1</td>
<td>84.5</td>
</tr>
<tr>
<td>Searching online application information and downloading forms</td>
<td>21.2</td>
<td>35.1</td>
</tr>
<tr>
<td>Applying for online public services</td>
<td>16.0</td>
<td>32.4</td>
</tr>
<tr>
<td>Webcam service</td>
<td>11.9</td>
<td>19.7</td>
</tr>
<tr>
<td>Drawing prizes</td>
<td>3.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Voicing opinions</td>
<td>3.1</td>
<td>6.7</td>
</tr>
<tr>
<td>Other</td>
<td>5.2</td>
<td>6.7</td>
</tr>
<tr>
<td>No Response</td>
<td>0.0</td>
<td>3.1</td>
</tr>
</tbody>
</table>


Notes: Multiple responses were possible (adding up to more than 100 per cent). The results exclude users from other government websites (N = 352 in March 2003 and N = 345 in September 2003) and only count the users who have had experience of the government portal site. The data came from a telephone survey, with stratified random sampling.

Secondly, at about the same time, the RDEC conducted two online questionnaire surveys based on ‘My E-government’, aiming to collect data about the users’ experiences with different functions of the portal site. However, only the users of ‘My E-government’ were entitled to complete the questionnaires. According to the results in March, the most popular uses included ‘winning prizes’ (47.9 per cent) and ‘browsing for information’ (32.8 per cent), but very few of the other items were used (all the others scored less than 6 per cent). Only 0.8 per cent of former and present members of the portal site voiced their opinions on the site. With respect to the
results in September, conventionally, ‘browsing for information’ (53.9 per cent) emerged as the most popular use of the site. However, by this time, the users had dramatically lost interest in ‘winning prizes’ (claimed as their favourite by only 15.5 per cent). Although the average use of every function rose, ‘voicing opinions’ was again the least used service (1.1 per cent) (see Table 4.5). Therefore, the government portal site seems not to make any great impact upon the users. Rather, it generally reconfirms the major uses of the government portal site, which is the same as the uses made of other government websites.

Table 4.5 Users’ Major Purposes in Accessing the Government Portal Site, 2003

<table>
<thead>
<tr>
<th>(%) of users reporting purpose</th>
<th>March 2003 (N = 7,901)</th>
<th>September 2003 (N = 2,060)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browsing (information/news)</td>
<td>32.8</td>
<td>53.9</td>
</tr>
<tr>
<td>Searching online application information and downloading forms</td>
<td>5.2</td>
<td>9.1</td>
</tr>
<tr>
<td>Applying for online public services</td>
<td>3.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Webcam service</td>
<td>5.9</td>
<td>7.4</td>
</tr>
<tr>
<td>Drawing prizes</td>
<td>47.9</td>
<td>15.5</td>
</tr>
<tr>
<td>Voicing opinions</td>
<td>0.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Maintaining websites</td>
<td>1.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Others</td>
<td>2.9</td>
<td>7.2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


Note: The data were gathered by an online survey, which was put on the portal site during the period of investigation.
Although the portal site has run for two years, when asked if they had accessed and used the services there, 71 per cent of the respondents said that they mainly browsed for information when they were on the portal site, while a smaller number went there for online application services (44 per cent) or watched real-time photos (40 per cent). However, only 5 per cent of respondents ever voiced their opinions or wrote an email to the government (RDEC, 2004; cited by ACI-FIND, 2004b*). Browsing for information is the most common activity among most of the users visiting the government portal site and other government websites. Significantly, the function of supplying real-time photos has seemingly become the unique characteristic of the portal site to consistently seize a visitor's attention at some point. Undoubtedly, this has added another selling point to the portal site besides the provision of routine government service and information. The real-time images may attract some users to visit this portal site, yet it is doubtful whether the other services are subsequently used if the average duration of stay is taken into account.

A successful website indeed requires many selling points. As the ACI-FIND suggests, 'the focus of e-government is neither on hardware nor on software, but a whole marketing strategy is required' (ACI-FIND, 2001: 31*). The marketing should include more than the promotion, the publicizing and the popularity of the website.
Meanwhile, the stability of the website cannot be neglected, but it is difficult to know how the website can constantly have a stable number of visitors and be regularly used. The solution may involve not only the content of the website itself but also Taiwanese patterns of use of e-government. After all, the fundamental question is whether or not the content can stimulate the users’ interest and meet their needs.

4.4.2.3. Service Quality

As the OECD suggests, ‘the quality of e-government service is often assessed as citizen satisfaction’ (OECD, 2003a: 146). This can reflect the fact that customers’ expectations and habits are evolving rapidly in a changing service environment. Some of the surveys mentioned above also provide figures on user satisfaction with government websites.

According to the government’s figures, it seems that the majority of Taiwanese Internet users are reasonably satisfied with their use of e-government. Amongst e-government users, the degree of satisfaction was 67.9 per cent in 1999, 78.8 per cent in 2001 and 72.7 per cent in 2003 (Department of Statistics, 1999*; 2001*; 2003*). Yet academics present a different picture from that of the government, indicating some uncertainty over the adequacy of e-government. A survey for the
report, *An Analysis of Structure amongst Taiwanese Internet Users and Their Motivation*, was conducted in late 1999. The research states that 40.3 per cent of the Internet users were satisfied with the performance of e-government. However, 35.9 per cent of Internet users still gave no answer when asked if they were satisfied with e-government. The research thus assumes that the people who did not respond may never have heard of e-government before or have little understanding of it (Wang, 2000: 71*). Another possibility is, of course, that some users of government websites, though dissatisfied with them, are not inclined to say so.

In parallel, *A Study of Participation in Public Affairs amongst Taiwanese Internet Users* is a complementary report to the previous one. This research found that although more than 70 per cent of the Internet users had heard of e-government before, only 20 per cent of the service items had been used (Hu, 2001: 77*). As for the overall assessment of e-government, the result was even less positive than shown in the previous one. Only 9.8 per cent of the Internet users were satisfied with the general performance of e-government. Most of the Internet population have negative attitudes towards or do not understand e-government. Therefore, the research suggests that the government should make greater efforts to publicize e-government
and to stimulate people’s desire to access it. Above all, the establishment of a portal site may be a means of addressing these problems (ibid, 83*).

Significantly, the work of e-government needs more time to prove itself. The two *Surveys of People’s Satisfaction with Public Services* showed very interesting results. In the survey of March 2003, while 43.4 per cent of Taiwanese people said that they were satisfied with the government’s efforts in e-government, 37.1 per cent still did not understand its benefits (RDEC, 2003e*). When the survey was repeated in September 2003, there was no great increase in the level of satisfaction (now 44.6 per cent) or decrease in the proportion of people who did not understand its benefits (now 35.6 per cent). Although in the September survey nearly 80 per cent of the portal site users said that they were satisfied with the one-stop service, the result needs to be read with care because the samples are limited. 80.8 per cent of e-government users said that they had no idea what ‘My E-government’ (the one-stop service) was and are thus unlikely to know where it is to be found (RDEC, 2003b*). It seems, for Taiwanese users, that the ‘one-stop service’ is nothing but one of a number of websites. The lack of appropriate understanding of e-government seems the primary barrier for Taiwanese people.
Furthermore, in late 2004, 43 per cent of the Taiwanese population knew about the e-government initiatives, while 44 per cent of them were satisfied the government's efforts (RDEC, 2004*, cited by ACI-FIND, 2004b*). Yet they may only know of a few of the initiatives and very few of them ever actually use any e-government service. For example, only 20 per cent of the Taiwanese population is aware of the recent major effort in the e-government initiative – the government portal site (My E-government) – and, not surprisingly, the use made of the portal site is relatively low. However, according to the same survey, of those who ever used any service on the portal site, 71 per cent were satisfied with the services provided there. If the users' satisfaction with e-government remains at such a high degree as shown in most government figures during 1999 and 2004, but lacks sufficient public participation, then resources are being wasted, no matter how successful the website design is.

There are many factors besides ignorance deterring e-government users from going on to use e-government services. Because so many e-government users mainly use government websites for browsing information, it is not surprising that their complaints tend to centre on issues of insufficient information. Among the reasons for dissatisfaction with government websites, the most frequent complaint is that the 'service items and information provided are too limited', followed by the comment
that the 'information is out of date' and 'imperfectly set out' (Department of Statistics, 1999*; 2001*; 2003*, see Table 4.6). Obviously, for these users, the government websites have failed to meet their primary need for information. This is very likely to drive users away. As a result, they may prefer other commercial websites and powerful commercial search engines when they look for information.

<table>
<thead>
<tr>
<th>Service items and information provided</th>
<th>January 1999</th>
<th>March 2001</th>
<th>March 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N = 943)</td>
<td>(N = 539)</td>
<td>(N = 626)</td>
<td></td>
</tr>
<tr>
<td>Service items and information provided</td>
<td>53.4</td>
<td>47.7</td>
<td>52.2</td>
</tr>
<tr>
<td>Information is out of date</td>
<td>44.5</td>
<td>41.4</td>
<td>30.1</td>
</tr>
<tr>
<td>Information is imperfectly set out</td>
<td>22.5</td>
<td>24.2</td>
<td>28.9</td>
</tr>
<tr>
<td>Unfinished online service items</td>
<td>19.4</td>
<td>17.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Late replies to emails</td>
<td>15.5</td>
<td>17.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Website design is not user-friendly</td>
<td>12.5</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Online service items are inappropriate</td>
<td>15.6</td>
<td>8.6</td>
<td>14.6</td>
</tr>
<tr>
<td>Operational procedures are complicated</td>
<td>8.2</td>
<td>7.2</td>
<td>9.3</td>
</tr>
<tr>
<td>Too little publicity</td>
<td>13.1</td>
<td>6.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Lack of request for public services</td>
<td>8.1</td>
<td>3.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Other</td>
<td>5.3</td>
<td>3.3</td>
<td>7.7</td>
</tr>
<tr>
<td>No response</td>
<td>2.6</td>
<td>1.9</td>
<td>--</td>
</tr>
</tbody>
</table>


Note: Multiple responses were possible (adding up to more than 100 per cent).

As described in the previous chapter, those in charge of e-government emphasise the importance of e-services, the main purpose of which is to reinvent public administration. However, the application services available online may not altogether
meet the users' needs. Many portal site users (65.2 per cent in the March survey and 82.2 per cent in the September survey) said that they did not have any need to use it (REDC, 2003e; 2003f). Inevitably, dealing with the online application service involves the transmission of personal information. For example, the majority of popular online services, such as filling online taxation and ordering online tickets, require the users to provide various items of personal information, including address, income and bank details. When asked if they hesitated about or never intended to use the online application service, more than 40 per cent of respondents said that they were reluctant to transmit their personal information through the Internet (ibid). E-government users worry a good deal about the privacy of their personal information following a transaction.

In 2002, the most successful year so far of Taiwanese e-government, although 96 per cent of Taiwanese government websites contained privacy statements, only 35 per cent of its websites offered security statements (Centre for Public Policy, 2002). The firm Taylor Nelson Sofres (2002) also warns about the security issue. In its survey, 75 per cent of Taiwanese people thought that the government websites were not safe enough (Taylor Nelson Sofres, 2002; cited by ACI-FIND, 2002b). The Taiwanese government has been aware that personal details should be protected, but in the eyes
of the users, the authority has not taken effective enough action to improve online security. Moreover, with the increased number of hackers stealing personal information through the Internet, even in 2004, the *United Daily Evening News* reported that ‘people still feel more secure using traditional ways of filing taxation, and not using the Internet’ (United Daily Evening News, 31/05/2004*). Apparently, e-government users do not trust online security to be powerful enough. Can all things ‘E’ live up to their promises? The provision of online application services claimed seems to be merely the government’s own wishful thinking. The users may search relevant information about taxation issues on e-government, yet they may not be willing to use online transactions and application services if they still feel anxious about online security. For the public, there is no substantial and clear benefit to be obtained by using online application services compared with traditional paper submission procedures. So they retreat to offline submissions, rather than risk losing private details to e-government spies.

4.5. Discussion

The nature of e-government has provided a variety of opportunities for policymakers and citizens alike, which has gradually resulted in a change in the relationship between them. E-government services can be seen as the online products provided by
the government. There are many factors which can affect the process of extending
the services to citizens. The online environment and demographics provide the
preconditions for the use of online services. Moreover, the use related to the content
of e-government services is always connected to some particular interest in the users’
minds. The satisfaction of using the government websites and attitudes towards the
effectiveness of offline and online mechanisms may be a comment on the
relationship between policymakers and citizens through the use of e-government.

In the case of the Taiwan, the data show that general acceptance of and participation
in Internet activities by the citizens has reached a satisfactory level. This is a sign
that the initiative of e-government may have a good chance of gradually representing
citizenship in Taiwan. However, the general use of the Internet in Taiwan remains at
the level of ‘browsing for information’, mainly for entertainment and personal
communication. To be precise, current mainstream use of the Internet is on the basis
of sociability and entertainment. This is still a primary level of use for the Internet.
The use of e-government has reconfirmed the preference for this level.

For the government, the e-government initiative in Taiwan means having to cope
with three distinct activities: supplying answers to queries, delivering services
electronically and interactive communication. The evidence shows that Taiwanese citizens still use the government websites and one-stop service for browsing for information, the first level, which for many is their limit. However, there is nothing wrong with this level. For citizens, this simply means that e-government has provided websites where they can find the information they need, which has the overall effect of keeping citizens better informed than would have been possible by other means.

Even the popular real-time webcam service in the 'one-stop service' can also be considered to be a kind of provision of information – albeit one that is orientated towards entertainment so as to attract users. The real-time photo is essentially a 'short' and 'quick' image. At least, to some degree, the phenomenon demonstrates that entertainment-orientated information is able to catch the participants' attention in the first place, but the information which accompanies it tends to be slight and shallow. The websites, of course, need many features to attract Internet users. However, are the users likely to use more of the services once they access the portal site? It may be too much to expect them to use more, because there are many variables to consider, such as the user's subsequent behaviour and the duration of their stay. The data show that the average duration of their stay at the one-stop
service is too short for any meaningful use, on average less than 1 minute, according to the research conducted by Chen and Lin (2002: 37*). It therefore appears that the portal site lacks the power to detain them, despite their motivation to access it in the first place. Then, although the authorities would like e-government to be considered a service, the percentage of people using online application services is less than half the percentage who browse for information, as illustrated in Table 4.4 and Table 4.5. Clearly, the users of this service show their interest in and their demand for trivial information, but nothing more.

As Delanty indicates, 'in a society dominated by information, access to information and the ability to act upon it is one of the main dimensions to participation' (2000: 130). E-government passes on government regulations, governmental news, government policies and navigational tools. Such an immense quantity of information may permit the development of better-quality citizen participation but so far it has not done so. In the case of Taiwan, if the 'one-stop service' can successfully integrate discursive governmental information, it is likely to serve as the best single window for citizens who want to access public information. Yet from the users' perspective, e-government has not attained the level of transparency, as most of them still complain that the information which it gives them is out of date and inadequate.
(see Table 4.6). Even when people are interested in using an online service, it would be natural to want sufficient and up-to-date information when they decided to use it. If the first level of information fails to answer users' primary queries, it may be difficult to attract them to use other aspects of interactive e-government.

Moreover, although the government has made an effort to accommodate many user-friendly, easy-to-use and entertaining features on the government websites, the solutions require merely the presence of the websites. At most, e-government can keep citizens informed to a limited extent with the present visual techniques. The information of e-government has been designed to meet the users' desire for leisure activities and amusement. This seems to turn e-government into commodification. Consumption of information dominates over other features of e-government.

However, the characteristics of information and communication are both important for democracy. Garnham distinguishes two critical communicative functions in the public sphere: the collection and dissemination of information and the provision of a forum for public debate (Garnham, 1990:111-112). Such dimensions have been proposed and arranged in the genre of e-government. One of the ideals of e-government is to ensure communication between the government and civil society,
as well as to invite citizens into the government’s decision-making process. The optimists even predict that e-government can be the ‘public sphere’ or the mediated arena between the state and civil society. Indeed, the Taiwanese government initially planned that one of the functions of e-government would be that of a communication bridge between the government and the public. However, as I argued in the previous chapter, the government has not paid much attention in practice to the interactive function. As regards the public reception of ‘government output’, most of the data show that very few of the interactive functions (e.g., online discussion or online voting) have been used to any extent in e-government (see Tables 4.2, 4.3, 4.4 and 4.5). Similarly, the investigation into users’ behaviour made no mention of ‘interaction’ in its league table of hit pages reviewed (Chen and Lin, 26-38*). The potential of computer networks, unlike traditional forms of mass communication, lies in their capacity for two-way communication, as Hacker indicates; in the absence of interactivity, these networks still serve as a means of dissemination from one source (formal or informal) to many receivers (Hacker, 1996: 224).

From the outset, the Taiwanese government has deliberately planned e-government to act both as a mechanism to reduce the cost of red tape and as a vehicle for the distribution of information. The presence of e-government meets a primary need for
information, but that in itself is not sufficient to justify e-government in the eyes of its users, because, to many users, e-government does little more than satisfy an online need. In a society with a deeply rooted consumer ethos, the users are allowed to consume even more information and services. However, if such demands of e-government have not made a substantial impact on the users’ lives, they may easily find other websites which they prefer, or may simply retreat to an offline mechanism.

If the government focuses on the customer-centric approach, however, there are many ‘technical’ and ‘commercial’ strategies to enhance the presence of e-government. For example, positive publicity can be created through successful PR and marketing strategies. A powerful search engine, updated information and user-friendly online procedures can appeal to users. These could help showcase the functionality offered by e-government and give users a more accurate perception of the features available. However, it should be noted that the inherently governmental nature of information and services is different from what is provided on other websites, and this is relevant to open government.

As Rabb et al (1996) remark, there is a correlation between open government and the information polity. It is insufficient simply to possess the technological mechanisms for accessing and delivering information. ‘Open government’ depends on the degree
to which public agencies wish, or are obliged, to make information available to citizens. This is the condition of ‘Freedom of Information’ legislation, which would require government agencies to provide reasonable access to their records and to foster a culture of openness in public life and governments (Rabb et al, 1996: 298). The evidence shows that in Taiwan the transparency, freshness and abundance of government information are disappointing.

More to the point, the structure of open government, especially its ownership, is significant. Perrit proposes that, unless citizens are vigilant, open government is simply part of a state-sponsored monopoly which has serious repercussions because such a monopoly opens the possibility of censorship, rising prices and increasing cost, as well as the risk of depriving the public of new technological developments (Perrit, 1997: 397). For example, the evidence shows that the users of e-government in Taiwan worry a good deal about their online transactions destroying the privacy of their data. In fact, what they are really concerned about is not only censorship from the government but also about these data being abused by the government or third parties. In some countries, a few commercial elements of e-government (e.g., commercial advertising) may be displayed on government websites unless citizens are vigilant. However, e-government in Taiwan itself is a state monopoly, which
strictly restricts any commercial element from ‘polluting’ e-government. As the government outsources some parts of e-government to the private sector under the umbrella of ‘reinventing government’, is there a risk that the operational face of government will be tainted by the commercial motivation of its private collaborators?

In my interview with the project manager of Seednet, the agency to which e-government is outsourced in Taiwan, she said:

‘There are two distinct arguments on e-government in the RDEC itself:

One argument is to pour all its energy into information retrieval, while the other argument is to treat online application service as the priority... When we (Seednet) proposed some commercial strategies to improve e-government, our ideas tended to be dismissed because of the conflict, not only between their arguments but also between the RDEC and ourselves. We do not do mediation work, but follow the instructions from the RDEC once their arguments are resolved’ (Lee, Seednet Interview, October 2003*)

Surely, the nature of e-government should be different from that of commercial websites. Ironically, commercial motivation was encouraged at first. But commercial
strategies carry much baggage which may not easily apply to e-government. Obviously, this requires more compromises of resources between the government and the outsource agency, as well as sufficient protection mechanisms either from the law or from concerns for online security.

Citizens in a democratic society require government to be accountable and transparent, but consumers cannot insist on the same from commercial providers. The ideal government should be the sort of political community in which citizens can and ought to participate, rather than be passively served by the state. Such characteristics can be significantly interpreted from the perspective of citizenship. ‘The status of citizen implies a sense of inclusion into the wider community and it is an active rather than passive status’ (Faulks, 2000: 4). The precious feature of e-government, its ability to allow a citizen-centred approach to be taken, is the working communication between citizens and the government. ‘A communication space could enhance democracy and promote citizen engagement’ (Detlor and Finn, 2002: 104). The difficulty, however, is to maintain the active participation of citizens.
4.6. Conclusions

The Taiwanese government has readily embraced the idea of e-government. It declared the aims of the initiative to be a customer-oriented government, and the subsequent 'one-stop service' even committed itself to providing a more open, accessible and communicable forum for its customer-citizens.

However, people tend to see the Internet as a tool for achieving their personal fulfilment only by means of the information which it provides. E-government users in Taiwan remain at the 'information' level. The facilities of e-government merely serve to make them better informed. They mainly browse for information to satisfy their curiosity, which is one way of engaging in e-government but not a very significant one. The public shows enthusiasm for e-government, but only within a limited area and they are still far from being active citizens as a result. They have increased their demands on e-government for trivia, but not for making other services effective and efficient. Yet should e-government merely serve as an 'online library' orientated towards entertainment?

The establishment of a 'one-stop service' is intended to deliver a package of services to citizens, in order to bring the administration closer to the people. The Taiwanese
government, according to the OECD, enthusiastically offers online service breadth and online service span, as most of the current providers have done. The issues concern the improvement of efficiency as a whole, interpreted from the government’s own standpoint. However, there is hardly any interaction or transaction, to be seen on the government website apart from browsing for information. If the concept of the ‘one-stop service’ is the counterpart of a ‘shopping mall’, the power to make transactions is a necessary utility. Yet the statistics show that many online application services do not meet users’ needs. Do a large number of services mean better ones? Or is it the case that the online application services are not what the users currently need? E-government users can always be content with online ‘window-shopping’, browsing for information as they do on other websites. They are not concerned whether there are other online services available. They may not feel that any greater efficiency and convenience, such as the authority optimistically anticipates, could be had from e-government.

E-government as an information provider or a one-stop mechanism reflects only part of the justified expectations of its users and the authority. Rather, e-government should be an arena for two-way communication between governments and citizens. E-government offers the chance for more interactive and effective discussion,
consultation and feedback on public policy debates. This is the feature which e-government could bring – a virtual political system which contributes to democracy. However, this aspect seems to have been neglected by the government and citizens have so far not challenged it. Of course, they have their own perceptions of e-government. In effect, for the users, e-government is used mostly for acquiring information; while for the authority, it is used for distributing information and pursuing government business. Therefore, the expansion of democratic participation has not yet happened. The missing link is interactive communication. E-government in Taiwan has bridged some of the gap between citizens and the government, but too much remains unbridged.

If one turns to look at participation, according to the level of citizens’ cognition and their attitudes, it is not clear how far the Internet can change civic culture. Citizens may be informed but they may still not become active citizens spontaneously. Although e-government is committed to providing open government, no-one is sure how far the public can or wants to use transparency of information and engage in decision-making. Political participation on the Internet does not give the same degree of involvement nor present the same content as the same thing in practice. But at least disciplined ‘good citizenship’ on the Internet with integrity is related to the
Internet users' motivation, behaviours and perception of public and community affairs, which are different from those of citizens in the real world. Being a citizen, of course, is not merely a matter of being well informed. The next question is how to transform an informed citizen into an active citizen, with the competence to influence public affairs. It is most relevant to this argument to understand the social structure and cultural values of the society under scrutiny. E-government indeed provides a channel, but the public competence lies in having more social and political systems which will shape and support political attitudes, such as civil education and the law.

Although many new democracies have adopted the Internet to communicate with their customer-citizens, this has not guaranteed the growth of democratisation in the form of virtual polity. Yet the efficiency of enhanced government service brings questions of administration closer to citizens, while interactive communication on subjects of public debate brings citizens closer to the process of democratisation. The Internet certainly has an impact on the form of government service offered, but it has not yet brought about an essential change in the process of decision-making between the government and citizens. The quality and quantity of e-government can easily be improved with the latest developments of technology, although the newer 'communication' technologies will not automatically change the level of use of
e-government. Thus, e-government has not yet resulted in the consolidation of democracy. Its potential depends on a change of attitude to its use, by both the government and citizens. Consequently, the challenge of e-government is not what form participation will take next, but rather how democratic values are to be enhanced through new ways of connecting the government to its citizens.
CHAPTER 5
PERCEPTIONS OF THE GOVERNED:
THE PUBLIC UNDERSTANDING
OF E-GOVERNMENT

5.1. Introduction

In democratic governments, there has been much debate about ways to ensure sufficient communication and mutual understanding between the policy makers and the public. The enhanced importance of the public is reflected in the increasing interest in what the public thinks: its judgments, opinion and attitudes. Public reactions and subsequent public involvement are valuable elements helping the policy makers in the process of decision making. In essence, the pattern of use of e-government has been closely associated with the perception of the content of e-government. Thus, the public understanding and use of e-government can become useful references by which the policy makers can assess the effectiveness of e-government policy initiatives and make proper modifications of the projects concerned from time to time.
As public policy involves matters of science and technology, the extent to which people understand what is communicated to them plays an important part in the process of governance. The notion of the public understanding of science has gradually been applied to the communication of public policy which relates to technological innovation. Many scholars define the public understanding of science as its knowledge of the content of science, substantive scientific knowledge (Raymo, 1998; Trefil, 1996), the processes of science (Durrant et al, 1989) or the awareness of the impact of science on individuals and society or on social factors (Wynne, 1995, Burns et al, 2003). These different definitions have been widely used in the public consultations preceding decision-making in the areas of science and technology.

Technology, based on scientific knowledge, uses the applications of science. The focus on the public's reactions to technologies may contribute to developing products, systems and services which will accommodate the preferences of the public as a whole (Hisschemöller and Midden, 1999: 18). Public understanding of science comprises the values, the behaviours, the opinions, the activities and the relationship between lay people and organisations. In the polity, the government is the major organisation contributing to the development of technology and public policy, while the citizens are the unique beneficiaries of this development. As a result, a
recognition of the public understanding of science is one condition for effective democratic governance.

E-government is not only a science-based technology but also an innovative product of government activity. It is expected that e-government will herald new opportunities to maximise the benefits of governance and democracy in the information age. The process, the structure of governance and, most importantly, the relationship between the government and the public are influenced, to some degree, by an adequate understanding of e-government. When the policy makers plan e-government initiatives in Taiwan, they need to take into account what ordinary people think of e-government and how they perceive it. Public opinion and attitudes towards these initiatives reflect their level of acceptance of and involvement in e-government services. People's choices in accessing certain government websites and using some of the services are subject to their conception of their value. It may be asked: what do people in Taiwan demand, understand and experience in e-government?

This chapter aims to discuss the capacity of lay people who have a significant interest in e-government issues to involve themselves in settings of communal
deliberation and to discover the dialogue and interaction between these 'interested and active members of the public' and the policy makers of e-government in Taiwan.

The chapter is divided into several sections: I begin with a theoretical discussion for policy-making of the public understanding of science, including a deficit model and a contextual model. The theoretical focus has moved from informed citizens to the enfranchisement of the public. I then apply these theoretical notions to a technological practice – e-government – for deployment in public policy. Empirically, I go on to look closely at the e-government users who actively participate in the consultative process of e-government implementation in Taiwan. The materials are drawn from their online statements about their experiences and their suggestions, as well as the offline discussion scenarios which consist of focus group discussions and dialogues between these e-government participants and the policy makers. I argue that e-government in Taiwan has a modern format, but lacks political efficacy, since it lacks the mechanisms through which the people can affect public policy. E-government barely convinces its users of its contribution to policy making. The government allows citizens only to consume the services of e-government under its control, particularly concentrating on the public access to information. This makes e-government only an alternative tool for propaganda with a beguiling mechanism of e-democracy.
5.2. Conceptualising the Public Understanding of Science for Policy-making

The public understanding of science is a concept, involving attitudes, behaviours, opinions and activities, which comprises the relations between the general public and organisations as they are mediated by scientific knowledge. It is a relatively new approach to the task of promoting science, technology and innovation among the public or lay society as a whole. The public understanding of science, in essence, can be regarded as a process of communication in matters of science and technology. The extent to which people perceive any innovation involves the activity of communication, including dissemination and interaction. 'Science communication' has been sometimes used as a synonym for the 'public understanding of science' (Office of Science and Technology and the Wellcome Trust, 2001: 316). The activity of science communication depends on participants' cognition of and attitudes toward science and technology. It is important to recognise that the long-term consequences of such communication may ensue as the participants contemplate their existing knowledge, encounter further experiences and restructure their thinking. The changes originate from the idea of cognitive dissonance/consonance which concentrates on an individual's psychological state. However, the variables occurring in a society are far more complex than an individual's cognition. If science communication is applicable
to public policy, of course, the concerns must extend from individuals to society as a whole. This also reflects the conceptual evolution of the public understanding of science, moving from the deficit model to the contextual model.

The concerns of the deficit model lie in scientific literacy. In this formulation, the public is characterised as having inadequate knowledge, while science has all the requisite knowledge. It is the public who are supposed to be 'deficient', while science is 'sufficient' (Gross, 1994). The basic premise of the 'cognitive deficit' here is that people need more information to remedy their deficit. As a result, copious information will stimulate people's willingness to support matters of science and technology. Simply speaking, the more knowledge people have of science and technology, the more supportive they are of science and technology. Conversely, a lack of scientific literacy may cause people to be sceptical towards scientific and technological subjects. In this regard, the underlying assumption is that the knowledge of lay people is shaped by irrational beliefs and superstitions. People will accordingly hesitate to adopt unknown or unfamiliar innovations because they have too little understanding of the relevant facts and possibly irrational fears. The deficit model at least identifies the importance of an informed public.
The deficit model, moreover, holds that there is a decisive content of scientific knowledge and information, which people should be taught. The only possible mode of communication between science and society is a one-way flow or, precisely speaking, a top-down model, that of 'teaching people science'. Society never has the chance to answer back or to interact with the communication senders in any way. This is the so-called 'canonical account of the communicational relationships between science and the public' (Shapin, 1990: 991), which is assumed to be absolutely under the control of the scientific community (Hilgartner, 1990).

The deficit model has been criticised in terms of two aspects: the first concerns its being asymmetrical, simplifying the public understanding of science as purely substantive scientific knowledge. It may not adequately address the true complexity of the issue (Levy-Leblond, 1992; Gross, 1994; Alsop, 1999). However, such contextual factors as culture, economic, social and political values, trust, risk perception and worldviews are to an extent all considered to influence the substantive knowledge. To supplement this model, the so-called contextual model has been proposed (Jenkins, 1994; Wynne, 1999; Miller, 2001). In the formation of this contextual model, the ways in which people utilise scientific knowledge are contextualised by external circumstances (e.g., political ideology) and internal
preferences (e.g., personal interests). The model not only explores the ramifications of the various origins of scientific knowledge but also addresses its impact upon society. Broadly speaking, scientific knowledge is embedded within wider political, economic, social and regulatory settings. Moreover, the specific applications of science and technology are closely associated with practices in everyday life in a particular context.

The second aspect of the deficit model to be criticised is that the mode of communication and the form of participation are too restricted. There is a tendency among the elite to see the ascription of deficit. In the deficit model, it is assumed that the delegations and the experts, with their own agendas and from their position of relative power, can deal adequately with the issues which concern the general public; however, in fact, they often fail to take account of the society to which they are looking for support. Consultation in the process of decision-making has increasingly been dominated by a small number of people. The claim that the common people are unique beneficiaries of the public understanding of scientific activities has become disingenuous. Sclove argues that ‘technology is implicated in perpetuating antidemocratic power relations and in eroding the social contexts for developing and expressing citizenship’ (Sclove, 1995: 7). Apparently, public participation is
constrained owing to the limited number of representatives. This raises the issue of a
democratic deficit in the public understanding of science, leading to a lack of public
involvement in policy issues.

Apart from the representation of those who should be participating, the mode of
participation is another point which the contextual model addresses. The contextual
model refines the relationship and the format of communication from a one-way flow
to two-way interaction. Unlike the asymmetrical nature of the deficit model, the
contextual model develops a symmetrical form in which communication is depicted
as an interaction between the scientific community and the public. The implication of
the contextual model is to have citizens who are more active than informed. An
'engagement model' of science communication is proposed, which creates a two-way
dialogue between specialists and non-specialists (Office of Science and Technology
and the Wellcome Trust, 2001: 315). Since the individuals and the groups may have
different understandings of science in a variety of contexts, different modes of
engagement are needed. Thus, the engagement, according to Gross, requires a
rhetorical reconstruction in which public understanding is 'the joint creation of
scientific and local knowledge' (Gross, 1994, cited by Burns et al, 2003: 190). The
contextual model not only brings about changes in the mode of communication but
also a recognition of the legitimacy of lay knowledge, as shared by local non-specialists. In particular, consultation with ordinary people, or non-specialists, is regarded as a great contribution to overcome the 'democratic deficit', which policy makers should take seriously.

For the policy makers, understanding ‘lay local people’ can be achieved by investigating local needs and cultural conditions. However, policy makers prefer communicating with various local scientific experts to talking with lay people directly. The local specialists, with their wealth of local knowledge, can and should inform lay people about the policy/decision-making process in science and technology. These local experts should be able to act as mediators between the policy makers and local people. They can also become the source of knowledge to motivate other local people to adapt to the impact of science and technology and the impact of public policies more generally upon their lives.

If local experts are used and recruited by the government, however, can they disseminate sufficient scientific knowledge to the laity and honestly reflect local needs for the policy makers? Or are they merely mouthpieces for the government? The problem is to determine whom these experts serve, for each possibility has
different social consequences. Michael and others argue that lay local knowledge is viewed as qualitatively different from that of scientific experts, insofar as it does not share in certain key assumptions and practices which underpin scientific enterprises (Michael et al, 1997; Michael, 1998: 314). The opinion of a non-expert is in this case as valid as that of an expert, especially if it seems that institutionalised expertise takes no note of public concern. In the end, can the democratic aims of decision-making be fulfilled without a democratic process of communication?

The process can be enriched through ‘procedures aimed at broadening the circle of actors addressing the issue of techno-science and its applications’ (Callon, 1999: 86). Moreover, communication with the laity is a continual process rather than a one-off and linear activity. Communication should take place within two-way interaction by means of open interaction, discussion, consultation and deliberation between the policy makers and the public. In this regard, many methods of communication have been proposed, including among others referendums, public hearings, public opinion surveys, focus groups, local information committees and citizen advisory committees. Moreover, new methods to support the public understanding of science have been developed, whereby non-specialists are given access to relevant information, with enough time to take account of it and debate it. They are given opportunities to
engage continually in discussions about scientific and technical issues and provided with enough background information to reach conclusions. These methods include: citizens’ juries, consensus conferences, deliberative polls, and so on.

In democratic societies, public involvement is important to the communicative process in governance. However, if public involvement is restricted to the limited participation of too few people, there is a democratic deficit. One of the challenges for science communication is to develop existing activities and communication strategies to reach out beyond those already interested. The civic culture of a nation and the localisation culture have profound influence on this kind of issue. Moreover, once more and more people get involved, the next question is how to convince them that they can affect public policy. If people do not believe that their action can influence decision-making for public policy, the democratic deficit remains. They are inclined to be the ones who are least likely to participate in the political process, no matter what changes are made in the mode of communication.
5.3. The Public Understanding of Technology and E-government for the Use of Public Policy

The line between science and technology is not always clear; they are sometimes interchangeable. Generally speaking, science is reasoned investigation, while technology is the application of scientific knowledge to achieve a practical result (Roussel et al, 1991). Technological innovation is based on scientific knowledge and it tends to focus on applications related to people's daily lives. Improving the public understanding of science embraces not only science in general but also specific technologies. In modern society, the implementation of technology can influence the relations between people and the values of a society by changing expectations. Therefore, the context in which people understand and feel toward specifically technological innovations can be determined by discussion about the public understanding of science.

In the public understanding of science, people tend to be most interested in the things which they can relate to their own lives (Office of Science and Technology and the Wellcome Trust, 2001: 324). E-government is an extension of Internet technology. It has penetrated into people's daily lives and may in time cause a substantial change of lifestyle. Hence, it should be set in a real-life context and people's interest in and
engagement with it should be considered. Those who are advocates of civic participation in e-government believe that the generations of citizens about to come of age politically have grown up with the Internet and digital communication technologies in their everyday lives. They will be more likely to become participating citizens if the means by which they can do so are similar to the those which they use for personal and professional activities (Seifert and Petersen, 2002: 202-203).

The recognition of informed citizens in the deficit model of the public understanding of science as a whole applies to their access to e-government. Even when the content of e-government is sufficient, it is unclear how much people understand and what course of action these informed citizens take. People should be informed before accessing and using e-government. The focus of the deficit model can simply explain the part played by informed citizens in e-government, but at present people are only concerned with the availability of e-government knowledge. However, such interactive mechanisms as online consultation, online voting and online discussion forums in e-government create more opportunities for citizens to engage in public affairs, exemplifying active citizenship. Undoubtedly, active citizenship still relies on informed citizens. Nevertheless, people's knowledge of e-government is merely a
pre-requisite, but not the goal. Only the focus of the contextual model can adequately explain the complex issues of e-government, especially its appeal for citizens to play an active part. In particular, public involvement depends upon the extent to which the public is equipped with knowledge, rhetorical and other skills, and support mechanisms for engaging with and influencing the process of policy-making.

According to Margetts and Dunleavy, the most obvious cultural barrier to e-government from the demand side (i.e., the public's) is the problem of social exclusion caused by the fundamental problem of unequal access to the Internet (Margetts and Dunleavy, 2002: 9). It is plain that the essential but most worrying issue is access to e-government – the 'digital divide' – which mostly refers to the split between the 'haves' and 'have-nots' as regards the access to new media and its use. The lack of physical infrastructure restricts the acquisition of knowledge and the opportunities for public participation. Therefore, the question of access, including technological, social and democratic implications, conditions the extent to which the public use and understand e-government.

Kling lays out the issues of 'technological access' and 'social access'. The former refers to the physical availability of suitable equipment, including computers of
adequate speed, equipped with appropriate software; while the latter refers to the integration of the professional knowledge, economic resources and technical skills required for using ICTs effectively (Kling, 1996; 1999). However, it seems that technological access takes priority over social access. Without access to the Internet, any discussion on the public understanding of e-government is a chimera. Almost all e-government initiatives reckon that the Internet infrastructure is the necessary condition for access to e-government. Technological diffusion proves to be the most important single factor driving the spread of e-governance (Norris, 2001: 126).

From Kling’s perspective, social access is the ability of diverse organisations and people from many walks of life to actually use the Internet services. It is not necessarily true that the divide of social access will automatically narrow, as Internet access spreads further. Demographics, diffusion patterns in the use of communication and socioeconomic development, among other things can plausibly explain to some extent the distribution of the Internet between different social groups. In particular, according to Norris, the heart of the social divide in Internet access lies in broader patterns of socioeconomic stratification which influence the distribution of household consumer durables and participation in different forms of ICTs (ibid: 234). Technological and social access, concentrating on the availability and accessibility of
Internet equipment, knowledge and skills, can account for the general pattern of access to the Internet. However, the specific use of the Internet requires much other evidence to demonstrate its value.

Widening the population which uses the physical infrastructure of e-government and the diffusion of government websites thus do not guarantee an increasingly democratic use of e-government. The issues of democratisation, political knowledge, public trust, public confidence, participation and risk reception have been raised. For example, Norris brings in the indicators of democratisation, technological diffusion and socioeconomic development to her discussion of the distribution of government websites worldwide. Apart from the global divide in Internet access and the social divide within nations, she indicates a democratic divide on the Internet between those who are politically engaged and those who are not – the choices of where to go online and what to do online being related to political resources (Norris, 2001: 123). However, it is possible to find other factors in this problem of democratic access within a nation. People's interests and knowledge and also their attitudes and opinions regarding political efficacy, affect their use of e-government.
In the question of social access, narrowly speaking, the public understanding of e-government can be attributed to people's competence and motivation. For example, language, ethnicity, cognitive computer skills and a positive personal attitude towards online transactions mainly impel the public to adopt e-government (Lee-Kelly and James, 2003: 1). A critical mass of manpower, knowledge and skills is probably necessary to support the implementation of e-government (Sharma and Gupta, 2003: 43). Moreover, the benefits of e-government to citizens can be maximised by giving them incentives to take advantage of electronic services (Margetts and Dunleavy, 2002: 12). But first the citizens must feel it necessary and must also associate e-government with more benefits than other traditional means offer. It seems that positive information can shape a good image of e-government services and can give people confidence. Then, once people can be motivated to demand e-government services, they start to expect positive results from doing so.

Broadly speaking, people's attitudes towards the government affect their access to and continued use of e-government. Their existing attitudes toward the government affect their willingness to use e-government services and further restructure their relationship with the government. For instance, people's level of expectation of the government and its trust in the government are factors which shape the extent to
which they understand and adopt e-government services (ibid, 10). If citizens have high expectations of government services, with high trust and strong confidence in government mechanisms in general, it is easy to lead them to accept online government services and trust the promises of e-government. Warkentin et al (2002) also indicate that citizens' trust is an important catalyst for the adoption of e-government. Trust is a major predictor of success in interactions with e-government.

Once electronic services are introduced, however, people may change their attitudes toward the government, if their experiences in using e-government services are positive. Their confidence may be reinforced and they may trust the government more. As West indicates, the integration of technology into political life is mediated by institutional arrangements, budget scarcity, group conflict, cultural patterns and individual beliefs and behaviour. The mediation of politics influences the potential of technological applications for public use. E-government has the potential to enhance democratic responsiveness and strengthen the belief in government effectiveness, although, e-government has in some respects fallen short of its potential to transform service delivery and public trust in government (West, 2004: 24). Nye et al also argue that e-government offers the potential to improve service delivery at lower cost,
which will improve citizens' confidence in the public sector (Nye et al., 1997). However, an increased trust in government effectiveness and growth of public confidence in the government is not sufficient to ensure the adoption of e-government. Rather, e-government should aim to develop in people a strong sense of their political efficacy – the belief that citizens' actions can influence public policy – and foster a participatory culture in public affairs.

Apart from personal factors, the community as a whole also plays a part in the public understanding of e-government. With the Internet spreading across wide geographical boundaries, its technological capacities have created niches for the emergence of virtual communities and the potential to revitalize democracy for a wider local public (Rheingold, 1993). The community, understood as the source of grassroots power in democratic systems, is now shown to have new meanings. The term 'community informatics', for example, refers to the use of ICT for fostering online communities among citizens who share interests and for supporting local communities of people who can interact electronically (Gurstein, 2000). Thus, the community is composed of geographical proximity and a group of individuals with shared interests. The integration of e-government and the community is centred on the interaction between the government and local people, as well as interest groups.
The implications include local governance (e.g., the management of local e-government) and online interactive mechanisms (e.g., online discussion forums and e-voting). It seems that such arrangements can bypass the mediating experts, leading to direct forms of communication between government and laity.

Although e-government provides an alternative opportunity for face-to-face communication by individuals, the community and the policy makers, the validity of such interaction is doubtful. The first problem is people’s perception of the benefits of e-government. Traditionally, civic participation requires some collective actions (e.g., voting) or some explicitly organised efforts which bring collective results. At mass level, the Internet has difficulty in mobilizing the disengaged people. The phrase that ‘politics remain as usual’ is still the common assumption. People may be not interested in everything to do with e-government. Although some people may be interested in some of its services, they may not perceive the benefits of online interactive functioning (e.g., online polling) through e-government.

The second problem is the degree to which the government pays attention to online consultation through e-government. Norris indicates the double-faced nature of e-government. Government web pages may serve as a new channel for transparency.
and accountability, but also as a form of state propaganda (Norris, 2001: 237). In her analysis of the correlation between electronic government and electronic civics, Fountain proposes a similar caution. E-government may be used for surveillance, monitoring, control and disinformation as much as it may be used for promoting transparency, accountability, and access to information and human development (Fountain, 2003). The effectiveness of e-government depends on a genuine motivation within government, beyond the rhetoric of e-government. This affects the public perception of e-government in practice. Moreover, political efficacy has its importance when it comes to collective participation in e-government. Whether online public consultation can make any impact upon public policy is a pragmatic consideration. If the people and the policy makers do not together enhance political efficiency, the public may always be satisfied by their inadequate understanding of e-government and their limited use of e-government will not concern them.
5.4. The Content of the Public Understanding of E-government in Taiwan

5.4.1. One-way Communication: Having Your Say

5.4.1.1. Context

As shown in previous chapters, the discussions on the policy initiatives for the public use of e-government did not bring about very vigorous interaction between users and policy makers. In order to assess the public response to the service quality of the government portal site, the authorities held an online event, 'Calling for Your Opinions on My E-government', based on the government portal site after the redesign of its website in October 2002. This was the first time that the authorities responsible for e-government had taken the step of listening to people's opinions since the launch of My E-government six months before. The event represents a process of gathering users' opinions of all kinds. Prizes were offered to e-government users – only restricted to the membership of My E-government – if they would write an account from 300 to 500 words long of their experiences of using the online service, with suggestions for its content and an overall evaluation. Alternatively, the participants could write on the topic: 'How can you make My E-government work for you in your everyday life'? The event lasted from 16th October to 31st October 2002 and attracted nearly 200 articles.
During the event, a team consisting of four people led by the project manager of Seednet, the outsourced agency of e-government in Taiwan, played the role of gatekeeper to check accounts before they were displayed. The project manager said that they would not publish any containing hate speeches, obscene language or nonsense and eventually put only 153 articles on the website (Lee, Seednet Interview, October 2003*). Then, the host of the event invited everyone (even non-members of My E-government) who could access My E-government to vote for the best 5 items out of these articles.

From the start, the host of the event kept a very open mind in designing the questions and was prepared to accept anything as long as it was related to the e-government issue. The suggested topics were as follows:

(1) opinions on the arrangement of the website;

(2) opinions on the content of the website;

(3) personal experience of using My E-government;

(4) ways of making My E-government work in everyday life;

(5) overall evaluation of the online services provided;

(6) suggestions given to My E-government;
These topics were varied, with the result that they produced many unsystematic articles. In order effectively to analyse their texts, however, I generalise these suggested topics under three headings: design, use and evaluation (see Table 5.1). The topics numbered 1 and 2 relate to the first of these, 'design', aiming to discuss the character of the portal site. The heading 'use', containing topics numbered 3 and 4, presents the users’ experiences of the portal site and how well they understand e-government applications. The theme 'evaluation', including topics numbered 5 and 6, reflects the users’ cognitive judgments and their expectations.

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<tr>
<th>Table 5.1 Themes of Articles</th>
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<td>Theme</td>
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</tr>
<tr>
<td>Design</td>
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<td>Use</td>
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<tr>
<td>Evaluation</td>
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5.4.1.2. Findings

Although the host of the event suggested different topics, most of the participants did not confine themselves to one single topic in each piece of writing. In fact, their narratives are multidirectional, with sometimes ramified topics. For example, a participant describing his/her personal experience of My E-government might mention his/her opinions on the arrangement of the website and provide a few
suggestions at the same time. Therefore, it is to be noted that the number of subjects covered in each piece by topic is greater than the number of articles published.

Most of the authors mentioned the theme 'use', drawing on their experiences of using My E-government and expressed their understanding of its general benefits. They were very keen to talk about ways of applying My E-government in their daily lives. Only a few of them noticed the change of website design (see Table 5.2).

Although the team who hosted the event had already sifted the messages before displaying them on the website, 5 out of 153 articles did not relate to any of the suggested topics. These 5 articles simply complained about personal concerns.

<table>
<thead>
<tr>
<th>Table 5.2 Responses to the Topics and the Themes Suggested</th>
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<tr>
<td><strong>Theme</strong></td>
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<td>Design</td>
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<td>Evaluation</td>
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<tr>
<td>Other</td>
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</table>
I. Heading: Design

The theme of design was the least popular among the numerous responses. Few people were interested in giving any opinion on either topics 1 or 2. Most people agreed that the display of the website was lively, with a wide selection of colours and sensible headings. Furthermore, the My E-government website stimulated an abundance of helpful information. Some participants were satisfied with the provision of personalisation on the website and they were pleased with the new design of My E-government. For instance, one participant ‘Tu-dou’ wrote: ‘I can set my favourite browser to manage the information and issues I particularly care about and receive e-newsletters regularly. This can effectively save time and energy for busy people like me’ (NO 150, ‘Tu-dou’, 15/10/2002*). Such statements are characterised by a highly positive tone.

Although many participants were satisfied with the amount of information provided, some expressed their concerns on the speed of updating information. As one participant said: ‘I feel that information on the My E-government is updated rather slowly, which is sometimes annoying’ (NO 122, ‘Beauty Yu-ling’, 17/10/2002*). Another participant frankly pointed out that ‘it is a shame that My E-government
cannot provide up-to-date information, such as tourism and government news' (NO 88, 'Ling', 20/10/2002*).

A few participants said that the search engine was out of order when they wrote their articles. They were irritated by the message shown as ‘Internal Server Error’. They assumed that the function had not yet been completed (e.g., NO 105, 'Eriju', 19/10/2002*; NO 108, 'Fly', 19/10/2002*). Interestingly, however, a few of them gave professional opinions on programme language, display mode and alternative browser support (e.g., NO 47, 'Paul', 25/10/2002*; NO 106, 'Ren', 19/10/2002*).

One participant, 'Paul', suggested that 'the webmasters should use the standard programme language and support different browsers. A simple and clear interface for searching is needed, which can provide clear results' (NO 47, 'Paul', 25/10/2002*).

In most of the responses to the theme on design, overall, the participants were satisfied with the layout and the content of the website. Their first impression of My E-government was positive, which brought a hope that it would be used effectively by the public. Only a few of the complaints made were about out-of-date information and unfinished items.
II. Heading: Use

In the event, the most popular heading was the use of e-government. Many participants had much to say about their experiences and understanding of applying My E-government to everyday life. There was a marked tendency to welcome all of the benefits of e-government. Many articles, addressing topics 3 and 4, commended the appearance of e-government. They were very keen to embrace the benefits that they understood. However, most of the points they made, despite their praise, seem quite superficial. For example:

‘My E-government is a really wonderful encyclopedia, where I can look for any information’ (NO 25, ‘Elsa’, 28/10/2002*).

‘...we can search information for example on art, medicine, taxation, transportation, etc and get to know the up-to-date news, as well as other people’s thinking from the polls...My-E-government is a handyman in my daily life’ (NO 112, ‘Julia’, 18/10/2002*).

The positive tone continues to manifest itself when the participants talked about their personal experiences of using My E-government. They describe how they started to use it and soon discovered how surprising it was. They share their positive
experiences and agree that they will continue to use it. In particular, for those who live in remote districts or the countryside, the appearance of My E-government has made a great impact. For example:

'I live in a small village. When the time comes to report my income tax every year, I always have to take one day off to travel to the city and patiently stand in a long queue at the Inland Revenue, which I feel irritated about. With the help of e-government, however, I no longer have to deal with this stuff as I used to. This is very convenient and timesaving for me' (NO130, ‘Yang Mei-mei’, 16/10/2002*).

'When I wanted to apply for a student loan a month ago, I was reluctant at first to go back to my hometown to deal with it. But I was told that, in fact, I could deal with it on my hometown government website, as all computing systems in the public sectors across the nation have already been connected. There is no need to go and speak to the civil servants. This is a totally different experience from any I ever had. I cannot imagine now how I could live without My E-government’ (NO152, ‘A-da’, 15/10/2002*).
However, some of the participants confessed that this was their first experience of accessing My E-government. They had visited the site and written down their thoughts only because of the prospect of prizes. A message posted by one participant, ‘Tina’, for example, said: ‘I was attracted to the prizes for this contest; as a result, I came to see what was going on this website. I soon found it helpful and interesting’ (NO 116, ‘Tina’, 18/10/2002*). Since only the members of My E-government are entitled to participate in this event, all newcomers were required to register first for membership of the site. One participant, ‘Feeling Something to Say’, said: ‘Because of the reward, I was willing to contribute my opinion. After becoming a member, however, I felt that I ought to have a look before writing down. I was surprised by the brisk and refreshing website layout and useful content. I should have visited this site sooner’ (NO35, ‘Feeling Something to Say’, 27/10/2002*).

Many participants have only a very basic understanding of the benefits which they can obtain from e-government. From the information which they gave, however, it seems that some of them only glanced at the homepage and then quickly noted their experiences. Not surprisingly, the content and the functions of e-government they interpreted were little more than basic common sense would have produced. Interestingly, some participants exhibited a passion for promoting e-government on
the basis of their personal experiences, no matter how recent and limited these were.

Their pieces are very similar in tactics to those of the ‘testimonials’ which have been widely used in propaganda and marketing. For example:

‘Have you tried e-government yet? Let me tell you how much pleasure it brings into my life and see how my life has been changed for the better...If you have not tried it, I would strongly recommend you to do so now ’ (NO22, ‘Hazel’, 29/10/2002*).

‘With the help of e-government, I am free to sit in front of my computer and use the online taxation service from home. I cannot help telling you how superb everything is here...’ (NO45, ‘Underclass’, 25/10/2002*).

‘My E-government is excellent and convenient! If you have any doubt about my statement, you should have a look and experience it for yourself. You would know that what I said was totally true. Believe it or not. (NO111, ‘Hunter’, 19/10/2002*).

# The term ‘propaganda’ should be treated with caution. In English, according to the Cambridge Advanced Learner’s Dictionary, ‘propaganda’ is used for information, ideas, opinions or images, often only giving one part of an argument, which are broadcast, published or in some other way spread with the intention of influencing people’s opinions (http://dictionary.cambridge.org). I treat ‘propaganda’ as a neutral term here and in the following text, rather than with its conventional negative connotations and biased implications.
As well as the above tactics of personal recommendation, a few participants chose to write in an impersonal style, but the messages which they conveyed were still suffused with positive images and acclamation. They appeared almost like press news releases from the government, or newspeak emphasising the successful achievement of e-government (e.g., NO31, 'Mr. Anonymous', 28/10/2002*; NO16, 'Pey', 29/10/2002*).

From the above evidence, it is to be doubted whether all the participants used the online services on My E-government, since their perception of e-government was so superficial and general. In particular, their understanding of ways to apply My E-government rarely went beyond a general perception of what it could do. This suggests that, while the participants may have a general knowledge of e-government, they have no very impressive understanding of the portal site. The major function of the event was to reveal how much the participants knew about the portal site, but the participants only rehearsed general impressions of the government websites.

III. Heading: Evaluation

When the participants evaluated e-government, most of them took an optimistic view. Some participants appreciated the government's efforts to improve its services, while
others were satisfied with the changes relating to bureaucracy. For many participants, the obvious improvement of government services was in convenience and efficiency. As one participant, 'Stupid guy', wrote: 'I now can obtain any information about my own interests in veteran serviceman by myself rather than relying on personal communication. I used to be given such information by neighbours or my children. I applaud the government for this thoughtfulness' (NO71, 'Stupid guy', 21/10/2002*).

The participants also agreed that the portal site has modified the stereotype of bureaucracy to some degree. In fact, they would rather, they said, do business with 'virtual' civil servants than actual human beings. The new type of government service reduced the need to face civil servants, which was positive news for some participants who were apprehensive about coming into contact with government employees. For instance:

'I have been fed up with the outrageous and arrogant attitude of the civil servants in the past. I also found that most of the government websites used to be dull and poor, until recently, when I used the search engine here to look for some legal proceedings and government documents. It took me only 30
minutes and I found out everything that I needed, which saved me a lot of
time. This is brilliant' (NO64, 'Illiterate', 22/10/2002*).

Despite the overall positive tone, some participants in their evaluations made a few
suggestions and warnings. In these, they concentrated on three things: the
arrangement of the website categories, the efficiency of the government’s response
and the publicity for the portal site.

Firstly, some participants suggested that the categories in the homepage needed to be
systematic, although its content was colourful and diverse. Indeed, too much
information easily results in disorder and may distract the users’ attention. A website
with a clear layout may attract regular users, rather than one-off visits. As one
participant, ‘Fly’, mentions: ‘the presentation of the hyperlink combined with the
pictures and references language on the website is reasonable and pretty, but it might
be difficult to find some small government agencies there’ (NO108, ‘Fly’,
19/10/2002*). Although the arrangement of the website is refreshing and decorative,
it may risk losing focus on the content if there are no clear instructions. One
participant ‘Shin-shin’ suggested that ‘each subject should have more clear layers
under the subject category’ (NO 81, ‘Shin-shin’, 20/10/2002*).
Secondly, most participants enthusiastically welcomed the improvement of government services in the overall evaluation, but some challenged the efficiency of government responses to people's online requests, such as the time it takes to receive an e-mail response and the difficulty of checking the progress of their online applications. 'Qian Shao-yi', one of the participants, for example, said that the efficiency of updating information was his main concern. Subsequently, he questioned: 'how long it takes to receive email feedback from the government email box and how often is the real-time news updated?' (NO1, 'Qian Shao-yi, 31/10/2002*). Another participant, 'Fly', had personal experience of using a few of the services advertised, yet he frustratingly found that some links did not work. He thus suggested that 'if the service has not been established, the e-government should not offer the link' (NO108, 'Fly', 19/10/2002*). It appeared that some services advertised on the portal site were still under construction. Moreover, the efficiency of government services is not only a matter of time and speed but it also relates to who are authorised to answer and what they can say in reply. One participant 'Milkfloating' had this concern and suggested that 'e-government should have an appropriate and useful feedback mechanism to reply to people's requests' (NO4, 'Milkfloating', 31/10/2002*).
Thirdly, some participants asserted that in general, e-government possessed many benefits and further inferred that the My E-government would be a useful site. This can be observed from their tendency to recommend the site, as shown in the participants' narratives on the use and evaluation of My E-government. Meanwhile, they identified that e-government would need more promotion than before. In the suggestions on promotion, one participant, 'Little White Pig', proposed that 'it would be a good idea to advertise My E-government on other commercial portal sites and provide more relevant hyperlinks' (NO89, 'Little White Pig', 20/10/2002*). Ideas of this kind are depend on cooperation between different media and the integration of different resources. For example, one participant, 'Wei-er', suggested that information relevant to My E-government should be distributed by means of an e-newsletter to the membership (NO3, 'Wei-er', 31/10/2002*). The power of news coverage is also taken into account by another participant: 'The authorities of e-government should initially create news value and exposure, such as holding huge and creative events. In so doing, the issue of e-government will be exposed in the news coverage' (NO 115, 'Little head', 18/10/2002*).

Moreover, reward is always a popular strategy in promotions. Quite a few participants expected to receive it (e.g., NO 89, 'Little White Pig', 20/10/2002*;
NO106, ‘Ren’, 19/10/2002*; NO 119, ‘Yun-yun’, 17/10/2002*). As one participant, ‘Pei-ru Shi’, suggests: ‘the e-government body can organize more events and offer more valuable prizes than now’ (NO 139, ‘Pei-ru Shi, 16/10/2002*). Her opinion will be a useful suggestion for the future, as several participants earlier (see above) admitted that their motivation in accessing My E-government had been the value of the prize. The newcomers to My E-government in particular were heavily influenced by the prospect of winning (e.g., NO 95, ‘Cai-yun Huang’, 19/10/2002*; NO 125, ‘Li-ya’, 17/10/2002*).

Obviously, among numerous websites, it is not easy to hold the user’s attention. Everyone has a different motivation to access various websites and personal criteria for judging the quality of the websites. When e-government users provided suggestions, they unconsciously noticed the usability of the site compared with other websites which they used, notably other successful commercial websites equipped with much stronger functions than those of the government. However, the one-stop service not only provides a friendly interface but also an effective government mechanism. The latter in particular creates an opportunity to change the bureaucratic stereotype. But if the users do not feel that the online procedure and inquiry
mechanism are effective, they will become as tired of such ‘virtual government’ as they have in their past experiences with ‘real government’.

IV. Other

Although the suggested topics generally led the participants into a pre-chosen topic, 5 out of 153 articles seriously digressed. The messages of these digressive articles reveal an interesting phenomenon. These authors took the forum as an emotional safety-valve and made use of it to air their complaints in public. They complained about their own miseries and hoped to be heard. Their motivation is probably quite different from many other participants, who were attracted by the prizes. Although these digressive articles made no contribution to the desired content, the authors’ behaviours raise a few unexpected questions. Did they take this opportunity because they have no other channel in which to vent their emotions? Did they choose this moment because they consider e-government to be a helpline? Or because they believe the government is at all capable of solving their personal problems? It is possible that these people have misunderstood the purpose of e-government, or they have known e-government only in terms of a limited content or that they were indifferent to the government’s purposes.
One of the ideals of e-government is to facilitate communication between the government and civil society as well as to involve the citizens in the government's decision-making process. Optimists even predict that e-government can become the "public sphere" or the mediated arena between the state and civil society. In fact, effective communication requires a mutual understanding of the subject of conversation, a common language and shared references to things known to all the speakers. E-government is not only the arena where the government and the public interact but also a subject which needs to be properly understood between them. Without mutual understanding of e-government, any operational feature of e-government can be either deliberately manipulated or partially ignored.

5.4.2. Two-way Communication: Two Regional Meetings

Communication can take place in two forms: first, the distribution of messages to certain people; second, interpersonal communication in a particular setting. The former is a leaner process of distribution, while the latter is an interactive process of communication through discussion and debate. In particular, deliberate discussions taking place in an open atmosphere and arena has become a typical democratic practice. Gross (2002) indicates the utility of open discussion, in which citizens can
broaden their understanding by exchanging information, views and feelings with other citizens (Gross, 2002: 251).

Although previously the online event, 'Calling for your opinions', presented a kind of online public opinion survey, the communication took a one-way mode. The government took the initiative by asking for the opinions of the governed. Yet, there is as yet no interactive communication between the participants and the authorities. A few months after the online event described above, the authority of e-government (RDEC) organised two offline meetings, one in the Northern region in December 2002 and the other in the Southern region in July 2003. One venue was held in the capital city situated in the North – Taipei City – and another in a key city in the South – Kaoshuing City – in Taiwan. These two regional meetings not only examined public opinion in terms of regional differences but also changed the mode of communication from a one-way flow to two-way interaction.

For a long time most Taiwanese people believe that there has been a 'resource gap' resulting in a developmental difference between the North and the South of the country. The digital divide is a fact here. In an investigation on the digital divide in Taiwan, under the sponsorship of the RDEC, the scholars Tseng and Wu (2002)
indicate that the level of Internet penetration of households reflects regional differences. Generally speaking, higher levels of Internet access in Taiwan centre on the region of the North and the West, while lower levels are found in the region of the South and the East and these bear witness to the digital divide (Tseng and Wu, 2002: 61*). Moreover, the meetings used several different methods of communication, such as focus group discussions and dialogues, not only one-to-one talk. To begin with, the participants were divided into different focus groups for discussions. They were asked to follow the outline and go through all the agendas set by the convenors who represented the authority of e-government. Subsequently, a Q&A time was arranged, which allowed the participants to take up points with representatives from the e-government authority, who responded to the participants’ queries. The two regional meetings eventually attracted more than 100 online users to show up in each offline venue. The meeting in the North attracted around 100 participants, while the one in the South attracted around 160 participants.

5.4.2.1. Public Opinions in the Northern Region

On 28th December 2002, the RDEC held the first one-day regional meeting – ‘E-Northern Taiwan, My E-government and 100 E-consultants Seminar’ – after the launching of My E-government (the portal site) in March and its redesign in October
in the same year. About 100 e-government users attended a traditionally face-to-face communicative meeting with their e-government peer group and the authorities. They were designated by the authorities the 'E-consultants of My E-government'.

The government hoped to invite 100 volunteers to contribute their opinions on e-government and become consultants for the implementation of e-government. In the introduction to the meeting, the deputy chairman of the RDEC, the highest level of governmental representatives present at the meeting, ambitiously boasted: 'the purpose of the e-consultants seminar is to treat online users as our priority concern' (Cai, 2002*). Apart from these 100 e-consultants, the representatives of the authority included: the outsourcing agency of the portal site, Digital United Inc., and its strategic partnership, Yam Digital Technology Co. Inc., as well as several officials of the RDEC, such as the deputy chairman of the RDEC, the director of the Department of Information Management and one of its Associate Research Fellows.

To begin with, the e-consultants were divided into seven focus groups for discussions, followed by a Q&A session. They were asked to discuss different issues, such as the services they hoped to use, the information they wanted to know and the way to target e-government publicity. However, the issues which had to be discussed can be generalised under two headings: the content and the adoption of e-government.
Overall, the members of My E-Government said that they made practical use of the services and developed many pragmatic suggestions on different issues. The superficial and shallow messages of the previous online discourses, obviously vanished. The quality of offline discussion was surprisingly meaningful. This demonstrates that these e-consultants had a higher understanding of e-government than those who presented their opinions in the previous online event.

I. Heading: Content

The demand for personalisation seems to be the most widespread. However, personalisation does not only mean customizing individual demands in a narrow sense but also broadly meeting the needs of specific groups. Some e-consultants hoped that e-government could provide services beyond the purely public ones, or rather personal web spaces. Group 5 hoped to be given individual web logs in e-government, while group 3 hoped to have free email accounts. Besides the requests for individual online space, some e-consultants wanted to receive public information through personalised services. Broadly speaking, the individual belongs to different groups, despite the classification by age, status and location. Group 7, for instance, indicated that e-newsletters, as a tool to distribute the information in e-government, should arrange appropriate content for different target groups.
A workable website and external links are essential for accessing the information in e-government. Group 3 suggested that the authorities should check on the possibility of being connected to the websites of all government agencies. Failing links and unavailable government websites should be reduced. Moreover, the availability of information must meet the needs of different user groups. This would make it necessary to classify user groups, in order to aim the information at the right people. Localisation was also considered. Group 4 suggested that the information services should add the local characteristics, such as local customs and local history of different locations. For tourists, e-government could provide such tourism information as tourist attractions, exchange rates, accommodation and transportation. If e-government could carry information about imports and exports, tariffs, industrial parks, business regulations and other information of this kind, business people would benefit from the chance to assess the cost and environment for investment. Similarly, group 6 suggested that e-government could provide step-by-step information for applicants, including the procedures, relevant regulations and forms to download, for those who wanted to establish their own business. However, not all groups can be so classified. Groups 6 and 3 paid attention to minority groups. They suggested that e-government should add specific information for unemployed and disabled people, such as subsidies and job hunting services.
The groups, of course, had affiliations with different communities to some degree. The concept of community was introduced when a few people raised the importance of adding local information. They hoped to see the information for specific groups linked with local communities. Group 6 had this kind of concern. Group 1 particularly cared about public security in the community and suggested extra information concerning security networks, community maps and help lines. They also suggested that e-government could make good use of volunteers, especially drawing on retired people, and 24/7 convenience stores, to help the operation of the project. Cooperation between individuals and the local community has been a favourite topic among many participants.

The personalising of the design not only serves local people but also provides better support for the foreigners living and working in Taiwan. A few groups mentioned that the English version of e-government was an unfriendly interface and hard to use. Group 4 found it difficult to search for useful information, as there was not much English information available to help foreigners to live in the country, nor much information available for them to help them understand Taiwanese culture. Group 6 thus suggested that every government agency website should provide a brief profile of its businesses, services and application procedures in English. Meanwhile, the
government portal site ought to introduce descriptions in English of some special social customs, festivals and historical events. In terms of a global viewpoint, the English version of e-government is the main entrance for access to Taiwan as a whole. This would be a good opportunity to publicise Taiwan to the international community.

II. Heading: Adoption

Many participants were aware that the publicity for e-government was weak. Most of them felt that this was the greatest obstacle to the public adoption of e-government. As a result, they proposed many strategies for enhancing publicity, which largely relied on social resources. Many groups agreed that it would be effective to combine online services and online/offline events, using the social networks which already existed. Group 2 proposed an alliance strategy between the government and private firms, especially those associated with computer software manufacturers and computing magazines. The provision of prizes and free trial software by these private firms would act as an incentive for people to access e-government for the first time. Group 1 conceived an online game of 'points collection' which would allocate different numbers of points, depending on players' access and use of online services. Prizes would be awarded for given numbers of points. This strategy is like the
‘loyalty card’ promotions, which are widely used in commercial enterprises.

Likewise, group 5 suggested that the government could promote the webcam service on the portal site and integrate travel cards with the provision of coupons and discount offers.

A few groups suggested that both online and offline events could motivate people to take part in e-government. Group 6 wished to see as many events held as possible. The group also proposed online polls to choose the best government websites, aiming to stimulate general interest in accessing e-government. However, such events rely on the support of other social resources. Group 2 put forward a strategy using the assistance of the mass media, such as news broadcasts and advertisements. Ideally, the media can set the agendas and voice the demands of the people. However, this kind of promotion cannot rely merely on mediated communication. The application of social networks was another strategy to be suggested.

The social networks suggested range from personal social circles to local communities and organisations. Emailing and forwarding the notifications of e-government, as suggested by group 2, can take advantage of personal social networks. The distribution of e-newsletters, which was proposed by group 7, is the
most common form of direct mail, as it goes to the subscribers’ email boxes. However, the effect of such virtual distribution depends on the extent of personal sociability. Local communities, however, are an aspect of society which the government may put its efforts into. Group 1 looked at neighborhood services and came up with the idea of electing a ‘virtual head of the local community’, with a view to increasing civic engagement in local communities, by means of strengthening local consensus and shaping local identity. In order to broaden people’s participation, group 2 emphasised the power of organisations, such as trade unions and farmers’ associations, and suggested the mobilising of these interest groups. The effects of this kind of social network have developed from one-to-one communication to one-to-many. Local communities and interest groups are targeted.

III. Communication: Questioning the Dialogue

The setting of the group discussions provided an opportunity for e-government users to broaden their existing understanding of e-government by exchanging information, views and feelings with other users. Basically, however, the interaction remains at a horizontal level, forming consensus within peer groups. However, the Q&A session was valuable because it allowed the dialogue to work vertically, giving the users and the government a chance to interact with each other. In response to the participants’
different questions, the government was surprisingly humble. The answers that the
government representatives gave invoked the idea of ‘public rights’. As they claimed,
the results of the Northern meeting accurately reflected the fact that the government
looked up to citizens and appreciated their contributions.

The participants mostly questioned the topicality and the richness of the information
provided. When some participants asked about the freshness of the content, hoping
for changes to the homepage possibly every three months, the government
representatives promised that they would increase the attractions on the homepage,
but in the meantime bandwidth was an important factor. Because they thought the
penetration of broadband in Taiwan was not high enough, downloading would tend
to be slow. Although a few groups had proposed many suggestions for enriching the
content during the group discussions, some participants repeatedly asked questions
about this during the Q&A session. The government only agreed that the number of
webcams would be increased by another 30 in the next year and that the e-newsletter
would move towards diversification. Moreover, the government mentioned the
possibility of integrating different social resources to help minority groups. The
e-government representatives indicated that as many as possible English versions of
government websites would be available to keep up with the spread of English
education in society. In order to provide friendly and accessible sites for disabled people, the government representatives promised that they would begin to use a more automatic mechanism, like that of the websites related to social welfare based in the Ministry of the Interior.

In the implementation of e-government, central government may not have expected resistance from the subjects of decentralisation – local governments and communities. In the early group discussions, one group suggested that a security area should be marked on the community map. One participant asked if the heads of the local community were unwilling to reveal such information, to which the e-government representatives did not directly reply but instead raised the issue of self-government. They said that e-government planned to release some web spaces as a communicative platform to local people and entire local communities. If senior residents and local companies can engage in community activities, the capacity for self-government will increase. Although it is accepted that some information should as a rule be kept secret, self-government depends on a free flow of information. This is inevitably related to the debate about open government, which acknowledges the public’s right to monitor and criticise those who govern.
The online discussion forums have always been criticised for irrational behaviour and irresponsible expression. Some Internet users took advantage of the feature of anonymity on the Internet to criticize other people without thought of their legal responsibly. One participant asked whether e-government should set a standard and proposed that all those who wanted to express an opinion must supply their true identity. Regarding this, the government’s attitude was rather cautious. In the mind of the government, e-government users should be responsible for themselves when they express their opinions on the government websites. The e-government representatives recommended passing the task to another government department, if appropriate. They indicated that the issue of identifying e-government users would be left to one side, pending further discussions with the Department of Household Registration Affairs.

The feature which distinguishes the e-government website most from commercial websites lies in its use of public rights. In the age of the Internet, to use it for communication highlights the possibility of interaction. When the government representative was asked about how to take advantage of public rights by embracing interaction, he replied: ‘Public rights in today’s circumstances means gathering different opinions and then putting them into practice’, in other words, ‘the right of
participation stands for the public right*. The government hoped that e-government could create an opportunity for public participation through the provision of different methods of access, such as mobile phones, PDAs and kiosks, in order to include as wide a range of user groups as possible. The e-government authorities were wise to set up a public meeting, under the auspices of the public right, to test public responses. Nevertheless, most of the questions put forward by the participants have not been answered, limiting the interactive effect considerably.

5.4.2.2. Public Opinions in the Southern Region

The RDEC organised a two-day meeting, 'E-Southern Taiwan and My E-government Seminar', on 4th July and 5th July 2003 in the Southern region. The first day, for government employees, was arranged to mark the launching of the e-government community (named 'Taiwan's Entry into the E-government community'), while the second day gave ordinary people in the Southern region a chance to join open discussions of e-government issues. 'Taiwan's Entry into the E-government community' aimed to give civil servants a communicative platform where they could exchange work experiences and share interests, among other things. Moreover, the RDEC planned to use this occasion to introduce the civil servants to the concept of lifetime learning by telling them about a series of training programmes. Because the
proceedings of the first day centred on governmental interaction between civil
servants (i.e., a G2G approach), which is beyond the scope of the present thesis, I
concentrated on the interaction between the ordinary people – interspersed with a
few civil servants – and the government representatives in the proceedings of the
second day.

The open discussion between the government and the people of the Southern region
follows the format of the previous meeting in the North held at the end of the
previous year. 160 people (including a few civil servants) attended the July meeting
and the official representatives were almost the same people who had attended the
meeting of the previous December. When the time came for group discussion, the
participants this time were first divided into six focus groups for discussion, followed
by a Q&A session. Following the same guidelines as the Northern meeting, the
questions assigned for discussion were under two headings: the content and the
adoption of e-government. Basically, in terms of the content of discussion, only few
differences appeared between the Northern and the Southern regions. However, the
participants from the Southern region presented more concrete and detailed strategies
to promote e-government than the parallel group from the Northern region, although
some propositions overlapped.
I. Heading: Content

The participants of the Southern region made similar requests about the personalisation of e-government services to those from the Northern region. During the proceedings, groups 3 and 4, for instance, suggested that e-government should provide free web email accounts for users. Group 4 listed several feasible personalised services, including a personal diary, web logs, guest books, notification of important dates and reminders of tax filing dates. Furthermore, the demand for personalised services extended to information of use in everyday life, such as coupons, allowances, weather, health and investments, among others. As a few groups indicated in the previous meeting, e-government user groups were hard to define. This may result in inadequate provision for some groups. The participants of the Southern region also indicated that the definition of user groups remained problematic. For instance, group 3 made the criticism that the services available at the time were inclined to serve civil servants more than ordinary people.

The richness of information was a matter of concern for the participants in both the North and the South. The participants of the Southern region were dissatisfied with the design of the interface and were doubtful whether there was enough information on the website. Groups 3 and 6 indicated that the layout of the portal site was
complicated and confusing. It lacked clear guidelines and simple step-by-step instructions, especially as regards its search engines. They also found it difficult to browse the information on the government agency’s events and its announcements.

The integration of data, which apparently affects the usability of the website, was another area to be criticised. A few groups raised an issue about the way in which information is used when online application services are sought. Group 6 said: ‘the identification of their online ID requires users to type in too much data, but unfortunately, the system does not always recognise the data*’. They assumed that the data between government agencies has not been properly distributed throughout the government network. Users may need to memorise many different accounts and passwords when they apply for different services. Group 6 thus recommended that there should be a citizen’s digital certificate, which ideally makes personal data available between different government agencies. While information should be protected, users will not be willing to apply for services unless the application procedure is simplified. Not surprisingly, group 4 thus strongly requested a one-stop service, which would integrate all government services by way of a portal site.
The English version of e-government was not only designed to support and help the foreigners who lived in Taiwan but also served as propaganda to attract overseas people who are interested in learning more about the country. The participants of the Southern region were particularly interested in this issue. Some of them believed that the English version of e-government could be used to attract the attention of people overseas and win international recognition for Taiwan. For instance, group 5 suggested that government websites could add business information in English (e.g., on subsidies, tax credits and financial matters) for the benefit of overseas investors and then encourage the international trade association to promote this service.

II. Heading: Adoption

It was agreed that the chance to win prizes can increase levels of adoption and participation. A few groups believed that rewards were one of the most popular strategies to use at the beginning. As group 5 said, with a reward, many people would access e-government. Group 4 optimistically believed that although the provision of prizes increases the cost, in the long run it is worth doing. The entertainment-oriented approach seems to be popular, but events can be designed for a more serious approach. Group 1 proposed an online quiz, with the winners receiving gifts,
coupons or money prizes. Meanwhile, group 1 suggested that there should also be
rewards for people who report criminal and pollution activities through this medium.

Multi-channel promotion of e-government was unanimously recommended by
participants, regardless of region. The channels would include not only the traditional
mass media (e.g., newspapers, television and radio) but also new media (e.g., the
Internet and mobile phones). Group 4 particularly mentioned that publicity for
e-government could be distributed via cable television, which had a very high
penetration of the households in Taiwan – 83.8 percent at the time (Nielsen Media
Research, 2003; cited by Chinatimes News, 2003*). The public broadcasting services
were the next channels to approach for this purpose. Moreover, a few groups
suggested that the new media could be a popular means of promoting e-government.

By definition, e-government is an Internet-based medium. Group 2 believed that the
circulation of e-government news on some popular websites could have a
considerable effect, because the group members assumed that most Internet users
would be exposed to such news or publicity, which might motivate them to access
e-government. Interestingly, mobile phones offered another channel to be mentioned.
Group 4 encouraged the use of text messaging, especially aiming at the younger
generation. In the meantime, the group suggested adding an entertainment-oriented
service to the portal site, for mobile phones alone. Group 5 suggested that the portal site could provide a service for downloading music ringtones or wallpaper to visitors’ mobiles. They hoped that the provision of this 'light' service could lead more users of mobiles to access e-government.

Public exposure of e-government relies not only on the medium of communication but also on social networks. The participants in both the North and the South noticed the importance of social networks in the process of interpersonal communication. Group 4 proposed three ways of one-on-one communication: between personal contacts, by opinion leaders and in communities. First, it pointed out that emailing and forwarding are techniques which are based on the presence of contacts. Second, that e-government participants can in some ways be regarded as opinion leaders, who may be able to persuade their friends and families to take part in e-government with them. Third, that three particular communities – teachers, students and parents – can work together. Once students learn about e-government in school, they can share the knowledge with their family and then parents will know of it or use it. As a result, the use of e-government will start to snowball.
The community is the place to promote e-government. However, the participants care more about their common interests than their location. As group 5 recommended, the government portal site could, to begin with, set up discussion forums for different communities, so as to attract as many people as possible. Location is not the only factor determining a community. Rather, a community is formed on the basis of people who share common interests and have a collective perception. The online learning communities/colleges, proposed by groups 1 and 2, are places where collective knowledge can be transmitted and its use encouraged. The proposals of groups 1 and 2, however, focus on the virtual community and the target groups comprise Internet users alone. Groups 2 and 4 gave a warning about the resultant digital divide between existing Internet users and non-users.

The grassroots influence was re-emphasised. Offline meetings would still be needed, as group 4 suggested, alongside the online community. Group 5 said: 'the government agencies could organise some workshops in the towns and local communities to introduce the benefits of using e-government*'. As group 4 indicated, local government could address the issues related to e-government in urban meetings and given them exposure in the local press. Community colleges could help to organise introductory courses and relevant seminars. Such interest groups as trade
unions and religious associations could also help to publicise e-government. Obviously, the meaning of 'community' is no longer confined to geographical entities. Most of the participants in the Southern meeting had a better understanding of the concept of community than those in the North. They made the distinction between offline communities and online communities and then proposed a number of appropriate promotion strategies.

III. Communication: Questioning the Dialogue

The participants of the Southern region put forward many more serious questions than came up in the Northern meeting. The content of the portal site was not their major concern. Rather, the coordination of online mechanisms, such as the integration of governmental data and online identification, became the leading issue in the Q&A session. In other words, the participants cared more about the 'back office' than the 'front office'. In response to the participants' queries, however, the government representatives concentrated on the importance of public participation and highlighted civic engagement in the adoption of e-government.

E-government is depicted as an alternative government service, which is presumably controlled by the government. A few participants, however, asked about the
possibility of setting up a nationwide civic association which would involve itself in the implementation of e-government. But the authorities, considering that it would have to be funded by the government, were not inclined to accept the idea. However, they did not rule out the possibility of cooperating with the private foundations and associations which had similar projects of e-government. In fact, the controversy here is which should dominate the initiative, the government bodies or the private bodies? The participants believed that the private bodies could take the initiative in applying and organising the promotional events. But the government insisted that the task of implementation is primarily one for the government and regarded the private bodies only as assistants which by their networking activities would help the system of e-government to flourish.

The government stressed that e-government services could not be compared with anything else. To the question why commercial services cannot be available on e-government, the government representative indicated two important features: the need for public trust and the unique nature of government services. The government representative said: 'no-one can trust the accuracy of information on a commercial website, but the government is responsible for providing accurate government information. Therefore, the information on the government website must show its
authority, so that it can be trusted*. Furthermore, the commercial websites are unlikely to provide some government services (e.g., the issuing of licences) which by their nature are for the government alone to provide. In response to another question on the difference between government websites and commercial websites, the government representative claimed: ‘firstly, the government has no intention of competing with the private bodies; secondly, a government service is part of its authority, which is regulated by the law*’. The government representative also met requests for free email accounts in e-government by invoking the authority of government. The government was anxious lest email accounts in e-government were overrun by spam; moreover, people might get confused by misleading information if the spam came from email accounts provided by the government. For the government, this could destroy people’s trust in the government.

Implementing e-government encompasses factors from both the front office and the back office, but very few people knew what was going on in the latter. When asked about the progress of online application services, the government representative stated that the integration of resources in the back office – the data exchange across different government agencies, for instance – was the most urgent challenge at the time. The government representative maintained, ‘the other challenge regarding
online application service is the citizen’s digital signature, which is related to the issue of privacy. Increasing numbers of citizens’ digital signatures and online ID will support the progress of online application services*. However, one participant complained: ‘I once applied a citizen’s digital signature when I applied for a visa to visit Mainland China, but was frustrated to find that only 4 out of 11 districts in Kaohsiung City could deal with such an application*. Another participant also complained about his experience of applying for an license to visit the mountains; when he tried to do so, there was no such service provided on e-government. The government representative replied: ‘Some public procedures have already been delegated to local government agencies. But admittedly, we need to strike a balance between the initiatives planned by the central government and their implementation by local governments*. The coordination of government agencies is thus apparently an important issue.

However, the unavailability of hyperlinks and ineffective email responses also reflect the asymmetrical position of the government. One participant raised the problem of external links on the portal site and complained that most of the hyperlinks did not work properly on the homepage. In response to these questions, the authorities said that they had set up a standard for the best government website and regularly
checked the agencies' websites. Moreover, in answering a question about the efficiency of email responses, the authorities were reluctant to admit there was any gap between a user's expectations and what actually happened. But they promised that they would do random tests on the speed of answering emails in government agencies, followed by a programme of in-service training. The authorities even claimed: 'the management of emails will be the priority for all government agencies*'.

The government finally promised that there would be a controlled implementation of e-government. In essence, the participants at the two meetings were already Internet users. Therefore, as one participant from the Southern region observed, the promise to increase the numbers accessing e-government and improve the identity of the portal site have been highlighted for too long. But the question arises, what does the government plan to do next? It is still not concerned about non-Internet users. Undoubtedly, this brings up the issue of the digital divide. As the government admits, there is a digital divide between the North and the South in Taiwan, as there is between the West and the East. However, in the content of their discussions, the participants in the South, perhaps surprisingly, have more knowledge and present more meaningful discussions than those in the North. The participants in both the
North and the South indicate the need for the widespread adoption of e-government. Is there any method of accelerating this process? The accessibility of e-government and the availability of online government information simply solve some problems of the digital divide. The issues of ‘technological access’ and ‘social access’ are important, but the underlying question in the use of e-government is ‘democratic access’. Unfortunately, so far, the government has still not come up with any solution, but has evaded the problematic question of the democratic divide.

5.5. Comparative Discussion

In democracies, any form of consultation can become a valuable source for decision makers in the process of formulating and implementing their initiatives. As Glicken observes, when motivating forces are brought into play, ‘decision makers in government and business are feeling increasingly compelled to seek citizen input into decisions that affect the public...not only because of legislative mandate, but also because it is good business’ (Glicken, 1999). In its implementation of e-government, however, the Taiwanese government has taken few measures to consult public opinion. The present form of communication resembles the traditional face-to-face meetings but the element of Internet-based consultation has been added.
The launch of the online event, 'Calling for Your Opinions on My E-government', provided an opportunity for individual users to present their views. Subsequently, two regional meetings were held, to air collective opinions from the bottom up and enable a dialogue to be heard between the people and the authorities. The discussion on the public view of regional differences in e-government is also useful for judging whether or not there is an issue of the digital divide. Hence, the government focused on the role of non-expert advice and recognised the importance of improving the interactions between the policy-makers and the public.

The format of one online event and two meetings in 2002/2003 allowed public opinion in all forms to be heard, from a linear monologue to a discussion with many voices and from individual statements to group consensus. Furthermore, the groups could enter into dialogue with the authorities. The formats were designed to facilitate interaction between disparate actors with a common cause, which proceeded on the lines of what is increasingly termed the 'deliberative democracy' (e.g., by Fishkin, 1991). In terms of the content, the online discourse obviously lacked 'heterogeneity' to some degree; whereas the offline discourse taking place in two regional meetings presented a more meaningful discussion and demonstrated more understanding of e-government than the online discourse.
The online individual statements were dominated by public acceptance of the benefits of e-government. Most of the participants in the online event warmly welcomed the appearance of e-government, often in fulsome terms. However, the motivating reasons and the understanding claimed in them were often superficial and shallow. Their interpretation of e-government showed that they did not fully understand it, demonstrating simply that most of the participants had some general knowledge and a good impression of e-government. Those who revealed their personal experiences on the portal site had a fairly positive view of it and advocated the advantages of using it.

E-government users have been informed about limited aspects of the service only, especially those tending to be positive. Most of the participants in the online event did not specify anything but talked mostly about the general benefits, without offering any balanced argument. At best, the portal site has established a basic reputation. It is interesting to speculate why many participants praise e-government so warmly. Is it because the participants themselves think they are supposed to say positive things in order to improve their chances of winning the prizes advertised? Or is it because they actually do not have much to say, never having formed the habit of critical analysis, and therefore repeat unrealistic praise to ally themselves with the
majority? Or do they hesitate to criticise the government’s work in such a
‘government-controlled’ forum, which they know to be under government
surveillance?

These suspicions may be interpreted as a cynical perspective that the government is
attempting to co-opt a wider public in uncritical support for its e-government
initiatives. First, to put it simply, due to the commercial element, the outsourcing
agency may have filtered the articles about online events in order to please the
government. Before any articles were displayed on the portal site, they were
monitored and some were filtered out. Then, the contestants consisted only of
members of My E-government. Only after the selected articles were displayed could
everyone without restriction of membership vote for the five best. The authorities
meant by this poll to maintain a form of democracy, especially in the later stages of
the event, but some censorship had already been exercised. Under the rules for the
event, there was room to manipulate online public opinion. Therefore, can it be said
that these articles reflect the true voices of ordinary people?

Second, if the expression of the participants drifts into conventional terms of praise,
does it count as propaganda? In their well-known book, The Fine Art of Propaganda,
Lee and Lee (1939) indicate many tactics of propaganda: name calling, glittering generalities, transfer, plain talk, testimonials, card stacking and band-wagoning. Of these, 'glittering generalities' – the idea that people can easily accept anything once it has been surrounded with words of praise – seems especially appropriate. Interestingly, online responses to e-government implementation in Taiwan exemplify the result of this kind of propaganda. Most online participants have accepted the benefits of the e-government initiative without criticism or resistance. Their interpretation and understanding of the applications of e-government make it seem 'too good to be true' and 'too sweet to be wholesome'.

Moreover, some online participants draw on their personal experiences, strongly recommending others to make the use of the portal site. This applies to some extent to the tactics of the 'testimonials'. Although initially testimonials, as defined by Lee and Lee, were applied to recommendations of the product by 'big names' as mouthpieces, peer recommendations have become one of the most popular strategies in the modern commercial world. Peer experiences have a more familiar feeling to ordinary people than 'big names'. In the online discourse on e-government in Taiwan, some online participants were willing to recommend the benefits of using the government portal site, although a few of them confessed that their recommendations
were made in the hope of winning a prize. However, the power of the peer group can be manipulated by the government. Peer experiences may stimulate the interest and emulation of others who may or may not have used e-government services. These experiences can be positive material for propaganda. The government may want to bring in the words of these participants to show their work in the best light, or to persuade other people to access e-government. Consequently, the need to demonstrate the consent of the governed has been taken by the government as the basis on which to mobilise and to 'refine and enlarge public views'. This appears to be turning into 'pseudo public opinion'.

If one refers to the online articles on the features planned for e-government, their substantive content lacks heterogeneity. The government plans three distinct features for e-government, namely information, transactions and communication, as illustrated in Chapter 3. In the previous chapter, I quoted statistics to prove that the public use of e-government in Taiwan restricts itself to information-relevant activities. The public shows its enthusiasm for e-government, but only in a limited area. When most participants in online events talked about design, use and evaluation, they applied them to information-relevant activities alone. Their understanding of e-government was thus homogenised.
In fact, the information feature consists of two aspects: dissemination and searching. Most online participants were used to receiving disseminated information and reading the information displayed on the homepage. The experiences they described are inclined to be a static description of browsing for general information, such as real-time news and webcams. Very few of them shared their experiences and knowledge of using the search function to access government information. Even those who had ever actively sought information via the search engine based on the portal site were not satisfied with the results of their search and the quality of updating of the information. It seems that the government had not properly prepared the search mechanism and was not concerned enough about its information management. Most of the online participants knew about the information feature of e-government, but their understanding remains mostly at the level of passively receiving information.

The online participants interpreted the feature of transactions in e-government in a limited way. They were aware only of the commendations for these services, but had met few critical opinions. Although there were 1000 downloadable application forms and 135 items of online application services available at the time (RDEC, 2002c*), most of the online application services have been substantially neglected, save for a
few (e.g., online tax filing), by these online participants. Only a few online participants described the advantages but no-one mentioned the risks (e.g., online security). They were so preoccupied by advocating the positive information that they had not explored the risks. Therefore, they were acquainted with the online transaction services to only a limited extent.

Of the three features, interactive communication is the least mentioned by these online participants. Public involvement in any form of interactive service is relatively low. Email is the only experience among these online participants. Only 2 out of 153 online articles on the online discussion board of the portal site comment on this. One of these two participants even remarked that online public discussion forums are like ghost towns, receiving little promotion or attention from the government decision-makers, while the other criticised their censorship mechanisms. Interactive communication is the only feature closely associated with consultation, but the online participants either neglected or distrusted the effects of the online consultation mechanism.

The online participants display their positive view and basic understanding of e-government, but their attitude seems to be overeager. Their understanding is
restricted to parts of information and transaction content and is presented in an
overwhelming attitude of approval. This insufficient knowledge may result in the
illusion of consent. In particular, the rules of the online event encourage
self-expression, which constitutes one of the essentials for participatory democracy.
Yet, without sufficient knowledge, such self-expression is nothing but partial
monologue. Significantly, a few online participants took the forum as an emotional
safety-valve. Moreover, the forum contributed little to public consultation. It was
more about establishing consent than genuine consultation and more for propaganda
than negotiation.

However, the two offline discussions had the effect of dragging some e-government
users up to reality and stimulated a certain amount of meaningful discussion and
mutual understanding between the users and the government. Compared with the
online participants, the offline participants had more knowledge and experience of
the content of e-government and could provide balanced arguments. Moreover, the
offline discussion took place in the North and the South, between which there was
assumed to be a ‘digital divide’ in favour of the North. But in fact, the participants in
the South provided more meaningful and pragmatic views than the others, especially
in their conversations with the policy makers.
Most of the participants, whether in the Northern region or the Southern, requested personalised services and an internationalisation interface in the content of the portal site. They all hoped that the services would meet the needs of different target groups and classified the groups clearly. The concept of community, however, was defined differently: while the participants in the North thought of community as geographical, the participants in the South conceived the community to be defined by interest. The participants showed their knowledge and experience of information-related activities. It is hoped that a wider public can be informed through a well-designed portal site.

Unlike previous individual statements online, which focused on knowledge about the government website, the participants in the North and the South were asked for more suggestions for the public adoption of e-government. This is far beyond a substantive knowledge of the website services. Adoption is not only related to 'technological access' but also to 'social access', in Kling's terms. The participants addressed the latter issue and indicated the possible integration of different social resources and social applications. Many participants and the authorities realised that the scant publicity for e-government has been the biggest obstacle to adoption. In both regional meetings, the authorities addressed promotion as a theme and the participants thus provided many strategies according to the common logic of
marketing. The participants' suggestions here were much more systematic and feasible than the online statements by the previous participants. They recognised the material attraction and the application of multi-channels.

Some of the earlier participants in the online event admitted that the prize was the only incentive to become an e-government user; while the participants of offline discussions equally suggested that the entertainment-oriented events and the prospect of rewards could attract Internet users to access e-government. For the Taiwanese people, the adoption of e-government depends on the sort of material inducements which everyone wants. However, such promotions, with their events and prizes, cost money. To be realistic, how much effect do such strategies have? The outsourcing agency of e-government in Taiwan, Seednet, not only takes charge of the running of the portal site but also implements the marketing strategies. In my interview with the project manager, she pertinently pointed out that such marketing expenses can be infinite: 'Marketing is a bottomless pit' (Lee, Seednet Interview, October 2003*).

Almost every participant in the offline discussions recognised the benefit of multi-channel applications. Most of them saw the importance of media communication and interpersonal communication. Their suggestions respond to
Roger's well-known 'diffusion of innovation' model. In his view, the diffusion of innovations can be described as a multiple-step process through which new products penetrate markets. He concludes that the combination of interpersonal communication and the mass media is the most effective way to diffuse innovation (Rogers, 1983). The participants in the offline discussions believed that the media are used for the public exposure of e-government information. The media which they propose include not only the traditional mass media but also the new media. Interpersonal communication, including social networks and the community, is also emphasised.

Social networks are recognised as important means for individuals and organisations to access and effectively engage with ICTs (Fountain, 1997; Di Maggio and Hargittai, 2001), using the size and nature of an individual's network of technological connections and relevant social contacts to develop and sustain their use of ICTs (Selwyn, 2004: 354). The participants in both the North and the South noted the importance of a social network in the process of interpersonal communication. They even addressed the value of personal contacts, opinion leaders and communities in the diffusion of e-government. In particular, the consolidation of e-government use lies in the community. The adoption of e-government can begin with its use by a
community and can integrate other social resources. Some participants in the Southern region, for instance, indicated that education and opinion leaders must play crucial roles in the public adoption of e-government.

Their suggestions are not widely different from the remedy for the digital divide proposed by several scholars. In *Technology and Social Inclusion*, Warschauer says that a physical infrastructure is necessary for Internet use and describes how this can vary, but he takes account of the role of literacy, education and various community organizations in achieving meaningful access across wider populations (Warschauer, 2003). Norris suggests that access can be widened by investment in schools and the community for accessing and training, together with a combination of further technological developments, falling costs and the appeal of mass entertainment delivered over the Internet (Norris, 2001: 235). These strategies provide some remedies for the divide in technological and social access. Norris once used the term 'democratic divide' to describe how different people use the political resources on the Internet. Can the same remedy be used to supply the deficit of technological and social access in the public adoption of e-government? The duality of e-government would also have to be taken into account. E-government is not only a government
activity but also a democratic mechanism. The concern for civic participation in policy making can only be an advantage.

However, the Taiwanese government always wants to dominate the implementation of e-government and thus circumstantially discourages civic participation. For example, regarding interactive communication, some participants in the Southern regional meeting expressed their willingness to get involved with the implementation of e-government. They hoped that the government could organise a civic and voluntary association to collaborate with e-government activities. But the authorities, invoking the cost factor, were not inclined to accept the suggestion. Meanwhile, the government opts for the strategy of outsourcing to private businesses over civic associations, partly for reasons of cost and partly for reasons of power.

E-government services have a few unique characteristics, which are quite different from other websites. Government representatives have their own reasons for being suspicious of non-government involvement. For instance, to answer the question why the commercial services cannot be integrated into e-government, it can only be said the government wants to maintain its authority. In particular, as regards the most popular information service in e-government, the authorities even claimed that
provision of accurate information was the government's obligation; but e-government can exactly play the role of accurate information provider. For the government, the commercial websites can never provide accurate information on all points; only e-government can. Citizens can thus trust the information from such an official channel. However, in the information age, there are many channels from which to access information, which in theory should allow citizens to judge the accuracy of all the information they receive. It seems that the government makes very conservative and arbitrary decisions, especially in the dissemination of information.

In *Times of the Technoculture*, Robins and Webster (1999) say that propaganda was in the past the hidden face of information, pursued for the sake of two aims: social control and information management, not always easy to tell apart. They then claim that a 'democratic society can justify and legitimate propaganda and information management on the basis of the ends to which they are applied' (Robins and Webster, 1999: 143). However, if the public has a smattering of knowledge about e-government, will the propaganda be made palatable through the authority of its information, which the government is keen to secure for its own benefit? As described in the previous chapter, for the time being, the public use of e-government
in Taiwan is concentrated on receiving and transmitting information. However, the information service of e-government is also in a position to hand out propaganda, owing to its unique and legitimate status. The government may therefore utilise this feature for propaganda, because the information has official authority.

The advance of technology has facilitated the process of communication. E-government brings a new method of communication between the government and the public. Yet the effect of the communication depends on how much people know about adopting e-government. The people in Taiwan have promoted the understanding of e-government as a ‘fact’, but civic engagement with e-government for the good of society or for public policy has not so far been generated. How can it be guaranteed that this communication will have a substantial impact on policymakers? If people have not so far had adequate motivation to contribute to public policy and appropriate understanding, e-government is nothing but one of a number of websites. Moreover, if the offline democratic mechanisms have not been integrated, people are not likely to believe that e-government has any effect on public policy, nor that they can actually influence decision-making by the means of participating in any electronic democratic interface.
5.6. Conclusions

The growing interest in e-government raises the question of how the government can increase citizens' adoption and use of the online government services. The Taiwanese government aims to understand how much e-government users know about such innovative government services via various means of communication, ranging from individual statements, focus group discussions to dialogues; this at least looks like a consultative process in a democratic society.

E-government in Taiwan has a modern format of communication, but the content is too homogeneous and represents a democratic deficit. Public understanding of e-government has been dominated by such a one-sided approach. The users begin with an attitude of overwhelming and uncritical support, which is clearly shown in their online statements. Their attitudes often sound unrealistically positive. Moreover, the monolithic content explains and perpetuates the superficiality of these people's e-government literacy and implies propagandist intentions on the part of the government. People have difficulty in developing critical attitudes based on relevant arguments and trade-offs. It seems that the dark side of e-government used ignorance to shape the illusion of consent. E-government is made to serve people's consent to the state's ideological domination. Some social scientists indicate that while people
with very low levels of factual knowledge tend to become more positive about science when they learn a little about it, once they gain more knowledge they tend to start thinking more critically (Zhang and Zhang, 1993). However, the effect of technological knowledge on attitudes is not always straightforwardly linear. Gaining more knowledge about e-government services has not so far led people to have balanced arguments on e-government. At least, the evidence shows that the online participants were influenced by such contextual factors as material considerations and entertainment-oriented events; and these were not even the ones who were censored out!

Maisonrouge indicates that offering information to people relies on communication. ‘With increased communication can come increased knowledge, increased creativity and increased understanding among people’ (Maisonrouge, 1984: 33). Through personal interaction with the policy makers, people’s perception of e-government can be reconstructed. The subsequent focus group discussions prove that participants had more knowledge and willingness to adopt e-government than the earlier disappointing results of public understanding. They clearly made their demands for personalised services, in the sense of entertainment-oriented promotions, in their adoption of e-government. Customer-led concerns and marketing strategies have
been substantially provided and encouraged. This also demonstrates the conventional focus of adopting e-government, which clearly addresses the respondent as a consumer but ignores other roles (e.g., as citizen) (Hisschemöller and Midden, 1999: 20). In the public understanding of e-government, consumer culture has had a substantial impact upon the nature of citizenship. As Michael indicates, the rise of consumer culture has major ramifications for the politics of the public understanding of science (Michael, 1998:314).

However, this kind of consumerist approach has arrested the public understanding of e-government at a relatively slight and shallow level and reinforced the managerial way of thinking. A personalised service, based on the spirit of customisation, not only reflects the need to reform public administration but also reaffirms people’s self-interest in using the electronic medium. The inducement of prizes and entertainment-oriented services can boost public access to and use of e-government, yet such marketing strategies have made it more likely that people will say positive things about e-government without offering substantial or critical suggestions. At best, this can motivate the public to transform itself from relatively uninformed citizen to an active customer.
It seems, then, that people can change their roles from passive receivers to active consumers of government services. However, even an active consumer never initiates action but merely responds to choices already made. E-government users can only choose between the choices affected by the policy makers. The impact of e-government upon people is that it informs them what the government has already provided, particularly through the dominance of the information provision in e-government. However, the information service of e-government is also able to hand out propaganda, owing to its uniquely legitimate status. E-government is likely to be used as an alternative channel for disseminating government information, reinforcing the possibility that it will be used for propaganda, because the information has official authority. Therefore, the government only allows citizens to consume the services of e-government in ways which are under its control, especially as regards information.

Moreover, e-government barely convinces its users that it will help them take part in policy making. People in Taiwan are not aware of the importance of the consultative side of e-government. They have had no sense that their participation in the online consultative mechanisms of e-government might be effective. There is a limited integration of the online consultative mechanism and the offline responsive
mechanism in the decision-making process. This is the element which e-government in Taiwan has failed to provide for its users. Nevertheless, the authorities have been too obsessed with consumer-led appeals and propagandist intentions. Therefore, it is hard to foresee any informed citizens, who are to some extent active consumers, who can be transformed into active citizens.

Behind the rhetoric, e-democracy, as Dahlgren and Sparks (1991) claim, is often initiated as a particular version of publicness, arranged around ordered forms of disseminated information, in which the controllers of official political channels decide on the definition of the problem and the content of the message and thus strongly influence the outcome. E-government in Taiwan wanted only to make people trust the government’s information, yet it has become nothing but an alternative channel of propaganda sweetened with the apparatus of e-democracy. If political efficacy cannot be improved with e-government, people will not care whether e-government may be used as a basis of civic participation. They can always content themselves with the choices made by the policy makers. Therefore, people lose because of the democratic deficit of their understanding of e-government with its consumerist strategies, under the shadow of the government’s propagandist intentions. This constrains the democratic use of e-government even further.
In his book *Being Digital*, Negroponte (1995) asserts that the new media will thoroughly transform social, cultural and political processes. ‘The access, the mobility and the ability to effect change are what will make the future so different from the present’ (Negroponte, 1995: 230). Proper application of ICTs can bring an immense potential to bridge inter- and intra-state disparities in human and social development. However, being digital does not mean completely cutting the links with the old world. Rather, it transforms the world which people used to inhabit and the way in which they used to respond to it.

Democracy is a highly contingent enterprise, the success of which is not only dependent on an adequate institutional design, but also on a multitude of the other factors which make new democracies work. Governance is the societal synthesis of politics, policies and programmes. It should be noted that having new ICTs is not the
panacea for improving the quality of democratic governance, but only one among all the instruments of governance. Yet e-government, as an innovative medium, not only has the potential to transform the nature of governance but also the social and political context in which it is deployed. However, applying e-government to democracy must coordinate with social conditions, cultural expectations and the other mechanisms for direct participation in governance. Moreover, on the basis of a country’s or a community’s democratic structure and history, each generation of citizens and leaders must build its own democratic experiences and dispositions. Earlier generations have witnessed their political systems and practices being dramatically altered by the changes in the mass media. However, the current generation is capable of seizing the opportunity to use ICTs to overcome democratic challenges and promote human and social development. What then is the effect of digitising this kind of synthesis, and having it online, on the quantity and quality of outcomes for society? What are the implications of e-government for the new democracies?
6.1. The Legacy of Authoritarianism and the Public’s Democratic Deficit

Making the transition from one political system to another and then consolidating it is not only a difficult task but also a long-term task taking several generations. If democracy is to become stable and effective, citizens must develop a substantial commitment to it. The fundamental institution for inculcating democratic values, knowledge and habits in each new generation of citizens as a long-term process is civic education for democracy in schools. In recent times, although ICTs are able to offer many new possibilities for active democracy, education for democratic citizenship is an essential foundation. It is expected that e-government will be a potential means for these ICTs to extend citizens’ access to public information and decision-making, in turn creating more informed and active citizens. However, what drives it is the actors’ political interests and knowledge. Civic education is regarded as a decisively enabling factor for acquiring political interests and knowledge, whereby people can be motivated to take part in democratic governance through different means. Therefore, in the information age, citizens without a basic knowledge of democracy, cognitive skills and practice in democratic activities, as well as the civic virtues and predisposition to buttress democracy, cannot sustain and improve their society by means of ICT applications alone.
This study seeks to take the Taiwanese experience of developing, using and understanding e-government as an example and accordingly to identify the effect of e-governance in the new democracies. Before analysing the impact of e-government upon the Taiwanese citizens, this study identified a democratic deficit in civic education in Taiwan, in which the concept of democracy has for too long been partly interpreted and partly misinterpreted. This deficient perception of democracy has become a fundamental barrier to any fully democratic practice which persists even to the present day.

Civic education, moreover, is not only taught formally in schools. Nor is learning confined to the national curriculum and textbooks, either. People should not limit themselves to learning citizenship in a single institution. They should be concerned to practise it beyond their school years. E-government can be regarded as a form of civic education which offers practice through an electronic medium. Most importantly, it is potentially an institutionalised way of practising democratic governance. Reviewing the policy initiatives of e-government, the public use and the public understanding of e-government in Taiwan, this study further affirms that the democratic deficit has extended from people's perceptions, derived from their early experiences of socialisation in school, to the later and more modern practice of
e-government. The democratic deficit of people in Taiwan constrains the potential of e-government to extend democracy. This can be attributed to the legacy of authoritarianism.

From the early stages of civic education to the latest applications of ICT in civic life, the government in Taiwan has to a greater or lesser extent used technology to sustain its hegemony. The authoritarian tendency has always remained in many areas of life, even throughout the application of e-government. This resonates with the view that a number of significant thinkers and political leaders within Asia are not convinced that democracy is inherently superior to other modes of governance (Kluver and Banerjee, 2005: 32). As Chapter 2 describes, traditional Confucian features and the political and social context have become breeding-grounds for state hegemony. Confucianism is often seen as providing an important moral basis to the social order, which stresses a harmonious relationship and the maintenance of order, founded on hierarchy. However, respect for seniority and obedience to authority have become necessary to the hierarchy. This kind of political culture cultivates a paternalistic form of authoritarianism.

Moreover, the strong state has been built up over time through the creation of
national norms and cultures in the system of civic education. A more liberal civic education was sacrificed for decades in order to consolidate the legitimacy of Taiwan and to intensify the hatred for Mainland China. The authorities established an educational mechanism to transmit their officially endorsed value systems and suppress any values which challenged their legitimacy. Sun Yat-sen’s *Three Principle of the People* was regarded as a way of reconciling Western democratic beliefs and traditional Confucian virtues. However, the government in Taiwan always claimed that it was the only faithful adherent to Sun’s ideal of democracy and accordingly used his doctrines as an ideological weapon against the Communist regime in Mainland China. This not only implies that Taiwan is the legitimate and ideological successor of Sun Yat-sen, but also represents nationalist aspirations to represent a ‘free’ China. In the national curriculum and the textbooks on civic education, the notion of democracy was wrapped in patriotism and simplified as a crystallization of anti-Communist ideology. ‘Democracy’ was an unrealistic attribute, nothing more than a symbol of propaganda. This reflects the authorities’ anxiety to declare its own legitimacy and justify its dictatorship. Civic education only served the ruler’s political intentions, in particular in the political and social context before the 1980s.

The 1980s marked the transition towards democracy in Taiwan. Civic education
turned its attention from ideological inculcation to the civic knowledge associated with a modern society. The knowledge of democracy which people in Taiwan absorbed had to be both constructed and reconstructed. Although the national curriculum pointed to democratic beliefs, some themes in the textbooks on civic education contradicted the essentials of democracy. Thus, only a partial concept of democracy was transmitted, giving people only a basic knowledge of politics. In practice, the Taiwanese authorities did not encourage the diffusion of democratic values. Participatory skills in civil society and in the electoral system were at first slow to develop. Since the mid-1990s, however, the textbooks have increased the content of civic knowledge and civic competence, concentrating on participation. More specifically, the public consciousness of national identity has been raised and deliberately geared to patriotic sentiments in the form of localisation (i.e., shown within a Taiwan-centred curriculum). However, the democratic literacy by which citizens largely make their democracy work has not been paid as much attention as other requirements of democracy. There is too little awareness of the ways in which the governed and the governors can interact to the public good. By the late 1990s, the reform of the national curriculum seemed like an outcome of the 'liberalisation' of knowledge, but the production of textbooks to underpin it has been chaotic. This may all too easily result in a confused spread of knowledge. Although civic education no
longer acts nowadays as a propaganda machine for hegemony, the values underlying democracy which correspond to the institutional changes are slow in emerging.

Civic education in Taiwan has gradually paid more attention to the mode of participation, but the values supporting democracy have not yet been fully instilled. Each generation in Taiwan has learned the concept of democracy differently. People today are made aware of the forms and the competences of participation, but they have not yet recognised the importance of democratic literacy. A stable political culture is rooted in traditional values and reproduced through early experiences of political socialisation and institutional change (Diamond, 1999: 164). In Taiwan, however, the heritage of Confucianism has inherently affected the piecemeal development of civic education. Moreover, the legacy of authoritarianism, the rulers' whims for reforming the national curriculum and its biased interpretation of democracy in the only available textbooks have all contributed to stunt the growth of the supporting values of democracy. This deficient perception of democracy may prevent people from wanting to practise democracy for themselves.

In the mid-1990s, the political climate in Taiwan became more open than ever before. Several successive democratic elections even brought Taiwan to the point of being
marked out as a new democracy. As this was happening, the rising standards of ICTs were improving government performance and making a positive impact upon society. In the eyes of the Taiwanese government, taking on e-government seemed to be obligatory, driven as it was by the modernisation and democratisation of the country. Although e-government has been promoted as a democratic instrument, the authoritarian residues have not altogether vanished from Taiwan. In implementing its modernising initiatives, the Taiwanese government replicated other global experiences of ‘reinventing government’ and other countries’ new use of ICTs. As Chapter 3 indicates, a description of the information infrastructure and public administration using ICTs takes up much of the policy initiatives. Most of the practical measures focus on the popularity of Internet application among government agencies and government workers. E-government in Taiwan was often seen simply as a matter of changing the government’s IT infrastructure and this is why e-governance has not accomplished its stated goal for democracy.

The Taiwanese government has been keen to promote e-government, while its interests have been submerged in matters of information and transactions to increase administrative efficiency. On the surface, e-government improves the efficiency of public administration and saves the government some of the cost of transactions and
manpower. The authorities, however, have been able to do this partly because they have at the same time transferred some of the workload and the complexities of public administration to the applicants. Therefore, I argue that the Taiwanese government practises a 'governmental egotism', based on government needs, which is more inclined to use information technology to reorganise itself than to incorporate more of the public in its operation. This seems to have been a managerial approach, as any bureaucracy runs its affairs primarily for its own benefit.

Although the feature of interactive communication has become more elaborate, the items provided and arranged have in many cases become vague and unclear. The government planners have simplified the concept of communication to one-way communication, namely, using e-government as an alternative official channel for distributing government information. They believe that the dissemination of government news is a part of interactive communication. E-government, allowing interactive communication, should be concerned with the feedback from the public, but this is not among the concerns of the Taiwanese government. Also, its inadequate and ineffective management can only be described as haphazard, and the state of it may hinder citizens who want to communicate with the government. Therefore, e-government is far from serving as a two-way channel of communication. It has
turned into nothing more than an alternative new channel for propaganda. In their implementation of e-government initiatives, the authorities merely make e-government appear more 'democratic' than such initiatives were ever intended to be.

Moreover, the government in Taiwan does not seem to be much distressed by the limited impact of e-governance, because its own interest may be only in bureaucratic benefits, but nothing more. The impact of e-governance has been relatively slight in matters of civic consultation and participation. It may be expecting too much to want online democratic features in the future to have any substantial impact on the offline mechanisms of policy making. The 'evolution' in those theoretical models of development described earlier in the present thesis has never been observed in Taiwan. The models simply look like fairly standard models of the evolution of democracy superimposed on the introduction of ICTs but omitting the distinctive features of ICTs; these indeed may be reinforcing the managerial side of government, rather than dissolving it. Hence, the emergence of e-government has not challenged the command structure of government and the ways of governance. In the Taiwanese case, the government's attitude was relatively conservative and rigid. Does e-government matter if the governance is democratic? The introduction of
e-government in Taiwan does not alter the hegemony of those in power. If anything, e-government is likely to be used for shoring up their authoritarian tendency.

Governance is the outcome as experienced by those on the receiving end. In an ideal e-democracy, e-governance evolves into participatory governance. Citizens' participation in governance, or their civic engagement, in particular, reflects the democratic values of e-government which should achieve it. This is the most distinctive feature which ICTs can contribute to democratic governance. Without making use of this feature, e-government is simply to be regarded as an instrument of government control. For citizens, e-government is then merely an uninteresting product under government supervision. Civic engagement, of course, involves turning informed citizens into active citizens, since being a citizen is not merely a matter of being well informed. The main requirement for being an active citizen is the existence of an information channel and the competence to access public affairs. Negroponte and numerous others identify the new facility as empowering, able to realise the elusive democratic ideal of an informed public (Negroponte, 1995; Barney, 2000; Slavin, 2000). For them, a new democracy will be activated through access to all information for all people at all times.
E-government can offer a channel for citizens, but it cannot decide how they should proceed from there. Even though citizens are informed, they still may not spontaneously become active citizens. As it was the policy makers in Taiwan who located e-government as an alternative channel for the distribution of information, however, the citizens who depend on it alone may not be adequately informed. There is a possibility that e-government makes no contribution to shaping informed citizens.

Can we optimistically believe that citizens informed through government channels will be turned into active citizens to participate in e-governance? Whether this transformation takes place depends on the users' characteristics, which are determined by their response to the content of e-government services.

In Chapter 4, it was shown that people in Taiwan tend to see the Internet only as a tool to meet their personal needs by means of the information which it provides. This is still a primary level of the Internet use. The popular use of e-government simply reaffirms the preference for using it at this level. In effect, e-government in Taiwan is used mostly to acquire information. Users mainly browse for information to satisfy their curiosity and desire to be entertained, which is one way of engaging in e-government but not a very significant one. Therefore, the public shows enthusiasm for e-government, but only of a limited scope.
The public use of e-government is centred on the demand for information, which may support the idea of promoting e-government as the government's information polity, heralding open government. The government, however, has no genuine intention of encouraging the transparency of information; what it provides tends to be out-of-date, entertainment-oriented and visually exciting. As many users complained, the information to be gathered on e-government was far from transparent or even adequate. E-government is as yet hardly capable of providing sufficient information. If the users' primary needs cannot be satisfied through the use of e-government, it may be difficult to attract them to other aspects of e-government services.

The government seems to put technique before substance. Entertainment-oriented features are preferred to substantial content. Take the government portal site, for example. The users were attracted by the visually exciting information, but could only access information from it which was mostly slight and shallow. Users never stay long enough to make any meaningful use of the site. As a result, they are not motivated to continue browsing the portal site. Although the government has made some efforts to incorporate friendly, easy-to-use and entertaining features on its websites, it seems to be satisfied by providing a website per se. At most,
e-government with its current visual techniques can keep citizens informed only to a
limited extent. The information provided on the government sites has been designed
to meet the users' desire for leisure activities and amusement. This seems to turn
e-government into a commodity. The provision of information and pretty pictures
monopolises the features of e-government.

If e-government is initiated to play the role of an open government's information
policy, it is insufficient simply for the public to possess the technological mechanisms
for accessing and delivering information. The communicative characteristic of
e-government should not only help to determine the shape of the public sphere but
also foster government accountability and a culture of openness in public life.
However, democratic participation has not yet expanded in the public use of
e-government in Taiwan. The emergence of e-government has only changed people's
status from passive receivers of services to active consumers. It may be expecting too
much that active consumers will equal active citizens. Likewise, e-government users
can always be content with online 'window-shopping', browsing for information as
they do on other websites. They are not concerned about becoming active citizens.
The next question, then, is how these informed citizens and active customers can be
transformed into active citizens, with the competence to influence public affairs. The
government has to persuade citizens of their political efficacy, convincing them that civic participation may produce a change in policy or redress for their discontents with the government. However, this aspect seems to have been neglected by the government and citizens have so far not challenged it.

E-government in Taiwan has bridged some of the gap between citizens and the government, but too big a gap remains. What is missing is a form of interactive communication. Moreover, there is a democratic deficit in the public use of e-government. E-government has not shown any substantial effect of interactive discussion, consultation or feedback in public policy debates. With the latest techniques and strategies, an interactive forum could easily be provided and improved, but the essential of interaction depends on perceptions and a change of attitude to its use, among both the government and citizens. Are people prepared to participate in public affairs using their competence as active consumers or active citizens, if the opportunities increase and they are equipped to do so? Would the government rather preside over active consumers or active citizens? Or would the government like to retard the growth of active citizens by limiting the information it allows them to receive?
The pattern of use of e-government has been closely associated with the perception of the content of e-government. People’s choices in using the media and their understanding of the media can be interdependent. How people use the technology and what kind of motivation they have are likely to affect the social outcomes, which echoes the ‘purposive behaviour’ of media users (Pool, 1978). The level of people’s understanding of e-government has also influenced public acceptance of e-government as an innovation and meanwhile shaped public attitudes to the government. Thus, the discussion on the perception of the public in Chapter 5 reaffirms the arguments of the previous chapter. The deficit in the public understanding of e-government corresponds to some extent to the public uses of e-government.

Chapter 5 presents two kinds of formats of civic engagement and shows the understanding of a group of e-government activists. The format has moved along the lines of what is increasingly termed ‘deliberative democracy’, while the participants were seen to be more openly critical when they interacted with the policy makers in person in the regional meetings than were those who took part in the earlier online discourse. E-government users thus transformed themselves to some extent from informed citizens into active consumers.
To begin with, the online discourse obviously lacked 'heterogeneity' in some ways. E-government users in Taiwan have been informed only about limited aspects of the service, especially the aspects which tended to be positive. This simply demonstrates that most of the participants were given a good impression of e-government. However, their interpretation and understanding of the applications of e-government is presented with such an attitude of overwhelming approval that it was made to seem unrealistically flawless. The homogenised content at once explains and perpetuates the superficiality of these people's e-government literacy and implies propagandist intentions on the part of the government. It appears that the government is attempting to co-opt a wider public in uncritical support for its e-government initiatives, with the tactics of 'glittering generalities' and 'testimonials'. In particular, the recommendations of peer experience have been applied. E-government users impose on one another without any explicit force from the government, because people believe the testimonials of others. The consent of the governed has become a basis for the government to mobilise and to 'refine and enlarge public views'. Nothing more is needed, from the authorities' point of view, but to ensure people's consent to the state's ideological domination.
In addition to this flood of uncritical support, the online discourse of the public, in its public understanding of e-government, has been restricted to information-related activities. Their understanding remains mostly at the level of passively receiving information. Subsequently, in the offline regional meetings, the participants again were inclined to stay at this kind of level. This phenomenon is not surprising, but it reaffirms the popular use and demands of e-government, as described in Chapter 4. Therefore, even those who were actively engaged in e-government services were merely informed citizens with limited knowledge and interests. In Chapter 3, theoretically, e-government was planned to redesign the quality, efficiency and efficacy of the existing information exchanges, the transactions, communication relations and processes. However, the impact of e-government upon people in Taiwan has barely attained the first half of its function, namely the dissemination of information. The other functions have become trivial accompaniments superimposed on the introduction of e-government.

Consumer culture has had a substantial impact upon the nature of the public understanding of e-government. The consumer-led concerns — ‘personalisation’, ‘advertising’ and ‘inducements’ — have become the dominant appeals of e-government services among the public. The tendency was not so clear online but
became very clear in the discussions between the participants and the policy makers in person. Enough personalised services and marketing strategies have been provided and encouraged so as to improve the public adoption of e-government. A personalised service, based on the spirit of customisation, reflects the need to reform public administration, as discussed in Chapter 3. Moreover, the application of advertisements and inducements, of course, is included in the marketing strategies of e-government. The deployment of these strategies reaffirms people's self-interest in using the electronic medium, as explained in Chapter 4. In particular, the inducement of prizes and entertainment-oriented services can boost public access to and use of e-government. However, this approach has reinforced the tendency for people to say positive things about e-government without thinking critically. The public understanding of e-government is at a relatively slight and shallow level. Since this kind of consumerist approach has dominated the public's perception, in fact, the application of material inducements has increased the managerial way of thinking. At best, the public can be motivated to turn from limited informed citizens to active customers.

But even if people can change from the role of passive receiver to that of active consumer of government services, the active consumer never initiates action but
merely responds to choices already made by others. Regarding requests for personalised services and the demands for information services, for example, the users can only consume the services provided and choose from the choices already made by the policy makers. Therefore, e-government mainly provides public access to information about public services. The impact of e-government upon people is that it transmits to them what the government has already provided, particularly through the dominance of the information provision in e-government. However, the information service of e-government is also able to hand out propaganda, because of its uniquely authoritative status. On the basis of the genuine motivation by the government and the dominant use of e-government by the public, as shown in previous chapters, it was then argued in Chapter 5 that e-government is now used as an alternative channel for disseminating government information. Yet this can reinforce the possibility that the channel will be used to transmit propaganda, because such information has official legitimacy. Even now the government allows citizens only to consume the services of e-government in ways which are under its control, particularly as regards the public access to information.

Moreover, people's perception of the benefits of e-government is based on self-interest, not on the public good. It is hard to see any collective action from the
users of e-government. Nor can they understand any collective benefits accruing from the use of e-government services. The problem is that people are not aware of the importance of the consultative side of e-government. They do not know whether public policy can be affected if they participate in such online consultation as deliberative polls and online discussion forums. If political efficacy cannot be improved by means of e-government, people will not care whether e-government may be acted upon as a basis of civic participation. In this regard, the government’s negligence should be blamed. Many online consultation mechanisms are like ghost towns, receiving little promotion and no attention from government decision-makers. Nor is there much integration of the online consultation mechanisms and offline responsive mechanisms into the decision-making process. The neglect of this implies that the government wants to discourage civic participation and connives at the continuation of the democratic deficit. The consultative side of e-government is merely a facility without any substantial effect on public policy. The potential of new ICTs has advanced two-way communicative methods, but these have failed in Taiwan to achieve two-way accountability. We are far from seeing any active customers engaging in e-government as active citizens and using it as a basis of civic participation.
To sum up, e-government has not eliminated the legacy of authoritarianism, but has ironically instead become a modern means to rework it. People in Taiwan suffer from a democratic deficit in their understanding and use of e-government. E-government in Taiwan has simply been used to shore up the government’s authoritarian tendencies. Hence, the major beneficiary of the application of e-government is the government, not the public. The effects of e-governance have been constrained by the legacy of authoritarianism and the public’s democratic deficit. In the new democracies, the prospects of electronic democracy should not be overestimated.

6.2. Revisiting Civic Culture

No technology is inherently democratic, efficient, good or bad. No single contextual factor is sufficient to support good governance with electronic means in any given political systems. While the focus and purpose of e-government globally remains promising, the successful implementation of electronic governance varies widely from one society to another. Indeed, democracy itself is a fluid and evolving subject. Change in the forms of democracy is based on the social conditions of the day. This is why the conditions for democracy cannot be created through technological innovation alone. Rather, the use and effect of ICTs for improving the quality of
democracy must reflect the changes at the democratic roots and the various reconciliations of modern societies. If a country lacks democratic traditions, it is unlikely to claim that it can use merely the implementation of e-government to create democracy. While e-government can be used to some extent to enhance the quality of democracy in the mature democratic societies, using e-government as a basis of civic participation in the new democracies has still a long way to go.

As Norris indicates, the capacity of the Internet for digital politics has particularly important implications for consolidation, but transitional democracies are still struggling to institutionalise their political systems (Norris, 2001: 239). In the new democracies, however, the use made of e-government for consolidating democracy is relatively conservative, for it is subject to two conditions: the legacy of authoritarianism and the public’s democratic deficit. They evolve from the political culture, which is always reproduced in the process of political socialisation. Perhaps it is useful in reconsidering the correlation between e-government and democracy, to emphasise the need for a ‘civic culture’ which would support democratic constitutions. Democratic consolidation, as Diamond says:

‘involves the behavioural and the institutional changes that normalise
Democratic politics and narrow its uncertainty. This normalisation requires the expansion of citizen access, development of democratic citizenship and culture, broadening of leadership recruitment and training and other functions that civil society performs' (Diamond, 1996: 238).

Democratic consolidation can only be achieved when a society’s culture has been largely or maybe completely transformed in a ‘modern’ direction. E-government in Taiwan has a modern and developed format, which is plausibly democratic. Since the idea of e-government comes from the West with its established democratic traditions, Taiwan has found it seemingly unavoidable to implement e-government in following the track of ‘Westernisation’. In fact, to many Western scholars, the democratic systems in Taiwan have recently been consolidated. However, people in Taiwan are still struggling to construct their image of democracy, having been fed the ideology of ‘pseudo democracy’ for too long. The implementation of e-government has been transplanted from the Western experience into Taiwanese society by a government which even assumed that the promising benefits of e-government would materialise. However, the democratic culture has not kept pace with the development of the open and maturing government websites. There is a divergence between people’s image of democracy and their empirical use of e-government.
Fukuyama (1995b) claims that democratisation in the non-Western world has largely taken place on the levels of 'ideology' and 'institutions', due to insufficient modernisation on the levels of civic culture and civil society. The heritage of Confucianism has inherently disadvantaged the shape of civic culture and subsequently the distorted civic education has resulted in a smattering of democratic knowledge for many generations of people in Taiwan. In the words of Pope, 'A little learning is a dangerous thing'.

Democratic change in political culture not only influences the way in which each new generation is socialised but also the way in which the older generations are resocialised. The people in Taiwan who were born in the 1970s and brought up in the transition from an authoritarian to a consolidating democracy in the 1980s and the early 1990s have had to learn to construct and reconstruct the notion of democracy with which they grew up. Between the 1970s and the early 1990s, the polity in Taiwan went through an evolution of institutions and people have experiencing the forging of a new ideology. It seems that a civic culture has been emerging. Since the mid-1990s, these people, most of them now in their 20s and 30s, have begun to witness many ICT applications in their everyday lives. Many of them have also used e-government to some extent and some of them even have become the major users of
e-government. In the meanwhile, these people again witnessed change in the Taiwanese democratic system, moving forward from a consolidating democracy to a consolidated 'new' democracy. Their offline experiences during these democratic changes are not, however, highly correlated with the use of e-government in their civic lives. New applications of ICTs complement other democratic practices in society, but have not replaced them. The modernisation has prepared the conditions for consolidating democratisation in the information age, yet the accompaniment of civic culture in Taiwan remains inadequate. The civic culture which previously existed has not been transferred from offline democratic experiences to later applications of e-government. The introduction of e-government only transfers the format of the institution from reality to virtual reality.

Democratic consolidation can only be reached when the vast majority of citizens accept democratic procedures as legitimate and when there is a high level of 'congruence' between authority patterns in culture and authority patterns in politics (Diamond, 1996; Eckstein, 1998). The ideal of e-governance may confer legitimacy on a digitalised democratic procedure so as to consolidate democracy overwhelmingly in the new democracies. Nevertheless, the legacy of authoritarianism and the public's democratic deficit have constrained the
effectiveness of e-government as an adjunct of governance. In the new democracies, in particular, e-government should be treated with caution when it is merely used to refurbish the government's authoritarian tendencies. E-governance as a route to democracy may be a delusory hope. If a new civic culture is not established but the people are still struggling with the legacy of authoritarianism, e-government may be over-rated as a weapon for consolidating democracy.

6.3. Limitations and Suggestions for Further Studies

This study has focused, as far as possible within the constraints of time, space and resources, on a number of issues with regard to the impact of e-government upon people in Taiwan. The aim of this study has been to understand the use of e-government and examine its general application in one of the new democracies. There nevertheless remain some limitations from the perspectives of scope and methods. A number of agendas are accordingly suggested for future studies, which are in part related to the limitations.

6.3.1. Limitations of the Scope of the Research

Firstly, this study took only the Taiwanese society as an example and therefore did not compare it with other new democracies, even those in Asia which, like Taiwan,
have been significantly influenced by the context of Confucianism. Secondly, this study set out to discuss the process of political socialisation of what formed the content for e-government, starting with a longitudinal analysis of civic education in schools in the context of political culture. Apart from the teaching of civic education in schools, nevertheless, there are many other mechanisms for political socialisation, for example, families and the mass media. They have influenced the public adoption of e-government to some degree. Unfortunately, this study could not cover all the possible mechanisms for political socialisation. Thirdly, the evolving issues of e-government are restricted to scope of the Internet, which is often thought of as ‘online government’ or ‘Internet-based government’. This study provided only a general survey of the Internet-based government services, but did not discuss any specific service in particular. There exist many non-Internet based ‘e-government’ agendas under the heading of e-government. These non-Internet-based aspects and projects may include Smart Card, Surveillance systems, Digital TV and Digital Audio Broadcasting-based delivery of government services and voting, among others, although some of them often have a crossover function with the Internet. This study did not deal with those non-Internet based e-government services, partly because most of them are not prevalent in Taiwanese society.
6.3.2. Limitations of the Research Methods

The difficulties of this study were the availability of official information and that of the interviewees. Firstly, some of the government websites which I accessed were not updated properly, promptly or efficiently. Sometimes there was less online information on those websites than on paper. This exactly reflects the poverty of online government information, about which many people regularly complain. Secondly, some of the official statistics on experienced users which I drew upon have only a limited number of research samples. This indicates the problem of the low use of e-government in Taiwan; it risks criticism of the validity of its representativeness and limits the possibility of generalising its conclusions. Thirdly, the firsthand information was restricted. Some of the e-government authorities were reluctant to be interviewed; their excuse was that the information was sufficient and it was to be found on the government websites. Moreover, finding e-government users to interview was another difficulty. Initially, I was not able to arrange interviews with enough e-government users from varied backgrounds. Meanwhile, due to budget constraints, I was not able to conduct my own focus group meetings either. As a result, I could rely for research data only on the minutes of the focus group meetings held by the authorities to provide this information. However, it would have been better to conduct focus group meetings and obtain firsthand information, not the
secondary data provided by the government websites.

6.3.3. Suggestions for Further Studies

In order to transcend the limitations and problems above, some suggestions for further studies may be offered. Firstly, there could be additional comparative studies of political socialisation between different societies among the new democracies which share similarities. Secondly, the structural factors influencing e-democracy can be further examined, especially the convergence of different media. To achieve the vision of e-democracy does not rely on a single medium, but on the integration of different media. Better analysis is needed to understand how e-government relates to other media. To be specific, do they support each other, or do they work independently? Their relationship affects other agencies for political socialisation in society. Thirdly, the discussion of e-government should not be restricted to Internet-related activities alone. Further studies should extend their concern to the application of mobile communication in the context of governance.

For the time being, the penetration of mobile phones in many societies is even greater than that of the Internet; while the thresholds of mobile phones, including their accessibility, cheapness and ease of use are much lower than those of the
Internet and many other telecommunication instruments. Moreover, the development of wireless infrastructures and new techniques provide the essential potential for mobile phones. The technical media mobilised for e-democracy may extend concern from the Internet to these mobile technologies. However, there are some questions to ask: will the mobile-based application of government service replace e-government and accordingly create a new type of ‘m-government’? Or will m-government simply be regarded as complementary to e-government? Can m-government bring a greater vigour to democracy or will it simply replicate the experiences of Internet-based e-government? Further studies addressing such questions can compare the effect of e-government and m-government for democratic use.

Finally, with regard to the methods for discussing the relevant issues of e-governance, further studies should, if at all possible, consider drawing upon interdisciplinary methods in analysing the content of ‘public engagement’, ranging from Internet exchanges and telephone surveys to focus groups and consensus conferences. In particular, the techniques evolving from the field of the ‘public understanding of science’ are recommended, consensus conferences or citizens’ juries for example. It would be useful to examine the responses from all stakeholders – governmental and non-governmental – in a well-designed consultation mechanism.
APPENDICES

Appendix 1. Interview themes and questions for the general public – those who have had experience of using e-government and participating in the regional meetings of e-government

1.1 People who have had experience of using government websites at an early stage

Interviewees: Four people living in Taiwan - two from the Northern region and two from the Southern region.

Venue: various coffee shops in Taipei City (in the Northern region) and Kaoshuing City (in the Southern region) in Taiwan.

Taipei City: 06/12/2002, 11:30-12:30; 08/12/2002, 16:00-17:00.

Kaoshuing City: 10/12/2002, 19:00-20:00; 11/12/2002, 19:00-20:00.

Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

Background

1. Could you briefly describe your background, for example your education, occupation and your age, if appropriate?
Experience

1. Have you ever heard of the term ‘e-government’?

2. How often do you access the government websites?

3. When do you normally access the government websites?

4. Why do you want to access the government websites?

5. What kind of government websites do you access most frequently and why?

6. What do you normally do on these government websites?

7. Have you ever used any services on the government websites before? If so, please tell me about your experiences.

8. What kinds of thing are you satisfied/dissatisfied with, in relation to the government websites?

9. Do you know the government portal site – ‘My E-government’ – and have you accessed it before?

10. What do you think e-government services affect your daily life?

1.2. People who have participated in the regional meetings of e-government

Interviewees: Four people living in Taiwan - two participated in the meeting of the North and two participated in the meeting of the South.
Venue: various coffee shops in Taipei City (in the Northern region) and Kaoshuing City (in the Southern region) in Taiwan.

Taipei City: 16/09/2003, 14:30-15:30; 18/09/2003, 17:00-18:00.

Kaoshuing City: 14/10/2003, 12:00-13:00; 15/10/2003, 15:30-16:30.

Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

Background

1. Could you briefly describe your background, for example your education, occupation and your age, if appropriate?

Procedure at the regional meetings

1. How many people do you estimate attended the meeting?

2. How did you feel about the atmosphere in the meeting?

3. What did you think of the government representatives' attitudes in response to the participants' queries?

4. Why did you want to attend the meeting?

5. Could you tell me what group you were classified in at the meetings?

6. Now, if I show you the summary of your group discussion (which I downloaded from the government portal site earlier), is there any difference from what you
remember of your discussion on that day?

7. Overall, were you satisfied or dissatisfied with the meetings?

8. What did you learn from the meetings?

9. Will you attend similar meetings in future?
Appendix 2. Interview themes and questions for scholars – those are from different disciplines in Taiwan and have some knowledge of e-government

2.1 Scholars specialising in media management

Interviewee: An Associate Professor, Dean of the School of Communication at a Taiwanese university

Venue: office in the School of Communication

15/10/2003, 15:00-16:30

Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

Management of Websites

1. What are the decisive factors in the operation of a website?

2. What are the differences in management between government websites and commercial websites?

Implementation of E-government

1. The government has stressed three focal points in the implementation of e-government: namely, the one-stop shop, information searching and interactive communication. In terms of the management of websites, do you think these
points are adequate and feasible? Are there any which you think are unnecessary and, if so, why?

2. The government has adopted an outsourcing strategy in the implementation of e-government, especially in the aspects of operation, maintenance and marketing. In this regard, what do you think are its advantages and shortcomings?

3. Among G2G, G2B and G2C, which sector do you think is the priority in the implementation of e-government?

4. Do you think the e-government initiatives can achieve the effectiveness of communication between the government and people?

5. What are the obstacles for the government, businesses and the public when they use the e-government for communication?

6. What suggestions would you offer for the management of e-government, and what measures should be taken immediately?

Prospects for the Internet

1. Do you think the Internet nowadays is capable of competing with the traditional media?

2. Do you think the Internet will dominate over other media and play a leading role in communication for future generations?
2.2. Scholars specialising in marketing and advertising

Interviewee: A Lecturer, the Department of Business Administration at a Taiwanese university

Venue: office in the Department

27/10/03, 12:30 – 14:30

Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

Marketing

11. What is the focus of the marketing strategy of the government portal site?

12. What differences are there between the marketing strategies employed by the government and the commercial websites?

Implementation of E-government

1. The government has stressed three focal points in the implementation of e-government: namely, the one-stop shop, information searching and interactive communication. In terms of the marketing of websites, do you think these points are adequate and feasible? Are there any which you think are unnecessary and, if so, why?

2. The government has adopted an outsourcing strategy in the implementation of e-government, especially in the aspects of operation, maintenance and marketing.
In this regard, what do you think are its advantages and shortcomings?

13. Currently, e-government in Taiwan faces the problem of low publicity. Regarding this, what suggestions could you make?

14. E-government in Taiwan also faces the difficulty of low use. Regarding this, what suggestions could you give?

15. What suggestions would you offer for the marketing and advertising of e-government, and what measures should be taken immediately?

Prospects for the Internet

1. Do you think the Internet nowadays is capable of competing with traditional media in the application of marketing and advertising?

2. Do you think the Internet will dominate other media and play a leading role in marketing for future generations?

2.3. Scholars specialising in computing science and website design

Interviewee: An Assistant Professor, the Department of Information and Communication at a Taiwanese university

Venue: office in the Department

16/10/2003, 13:00 – 14:00
Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

**Website Design**

10. What are the decisive factors in establishing the presence of a website?

11. What are the decisive factors in the operation of a website?

12. What are the differences in website design between government websites and commercial websites?

13. Do you think that the Taiwanese people have particular concerns over the use of the Internet?

14. In order to meet their needs, what arrangements should be provided on the websites?

**Implementation of E-government**

1. The government has made efforts build a one-stop shop service. Do you think this kind of operational model taken from commercial websites can apply to the non-profit government portal site?

2. The government has stressed three focal points in the implementation of e-government: namely, the one-stop shop, information searching and interactive communication. In terms of website design, do you think these points are adequate and feasible? Are there any which you think are unnecessary and, if so,
why?

3. The government has adopted an outsourcing strategy in the implementation of e-government, especially in the aspects of operation, maintenance and marketing.

In this regard, what do you think are its advantages and shortcomings?

Evaluation of the Government Portal Site

1. Could you comment on the presence of the government portal site (www.gov.tw)?

1) Does it have a clear layout?

2) Does it have a friendly and easy-to-use interface?

3) Does it have a proper introduction on how to use it, especially for newcomers?

4) Does it provide adequate functions for information searching?

5) Does it provide adequate functions for online application services?

6) How powerful are its interactive features?

7) What are the advantages and shortcomings on this portal site?

8) What is your verdict of this website?

2. What suggestions would you give on the government portal site and government websites in general?
2.4. Scholars specialising in sociology and the information society

Interviewee: An Associate Professor, also Associate Research Fellow, the Institute of Sociology at a research institution in Taiwan

Venue: office in the Institute

01/10/2003, 10:00 – 12:00

Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

The ‘Information Society’

1. How do you define the ‘information society’?

2. Do you think Taiwan has become an ‘information society’?

3. What kind of challenges does Taiwanese society encounter in relation to the information revolution?

4. How should the government and people make good use of the Internet in their everyday lives?

5. What are the obstacles when different groups use the Internet for communication?

6. Do you think that the Taiwanese people have particular concerns over the use of the Internet?

7. Many people in Taiwan show a strong interest in political affairs through the use
of traditional media. Can this transfer to the Internet?

Implementation of E-government

1. The government has stressed three focal points in the implementation of e-government: namely, the one-stop shop, information searching and interactive communication. In terms of social impact, do you think these points are adequate and feasible? Are there any which you think are unnecessary and, if so, why?

2. Among G2G, G2B and G2C, which sector do you think is the priority in the implementation of e-government?

3. What are the decisive factors in the implementation of e-government?

4. What are the necessary conditions for the development of e-democracy?

Prospects for E-government

1. Do you think the Internet can contribute to democratisation in Taiwan?

2. Is it possible to achieve e-democracy through the use of e-government in Taiwan?
Appendix 3. Interview themes and questions for policymakers - those are in charge of e-government in Taiwan

3.1. Officials in charge of implementing e-government initiatives

Interviewees: two associate research fellows, the Department of Information Management, Research, Development and Evaluation Commission (RDEC), Executive Yuan.

Venue: Computex Exhibition in Taipei, Taiwan.


Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

Implementation of E-government

16. Among G2G, G2B and G2C, is there any order of priority in the implementation of e-government?

17. What are the decisive factors in the implementation of e-government?

18. What are the obstacles which you have encountered in the implementation of e-government initiatives?

19. Why does the government want to apply an outsourcing strategy in the implementation of e-government?
20. How can the RDEC cooperate with the outsourcing agencies?

21. How can the RDEC coordinate with different government agencies in the implementation?

Evaluation of E-government

1. Do you think e-government has achieved the effectiveness intended by the government?

2. Thus far, among G2G, G2B and G2C, which sector has seen the greatest effect?

3. Which sector has seen the weakest effect, and how can the government improve this?

3.2. Officials who directed the implementation of e-government initiatives and relevant projects

Interviewee: Director of the Department of Information Management, Research, Development and Evaluation Commission (RDEC), Executive Yuan.

Venue: Computex Exhibition in Taipei, Taiwan.

16/10/2003, 15:00-16:00.

Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.
Implementation of E-government

1. E-government is to be used as part of the reinvention of public administration. In the current state of the ‘knowledge-based economy’, are there any changes in the status of e-government?

2. Among G2G, G2B and G2C, is there any order of priority in the implementation of e-government?

3. What are the obstacles that the government has encountered in the implementation so far and what measures has the government taken to surmount?

4. How has the government responded to public opinion through the use of e-government?

Evaluation of E-government

1. What are the benefits and disadvantages that the government has obtained since e-government has been outsourced?

2. Do you think the implementation of e-government has achieved the effectiveness anticipated by the government?

3. Thus far, among G2G, G2B and G2C, which sector has seen the greatest effect?

4. Which sector has seen the weakest effect, and how can the government improve this?
Prospects for E-government

1. What are the future plans for e-government?

2. Is it possible to achieve e-democracy through the use of e-government in Taiwan?

3.3. Officials who led the knowledge-based economy initiative in relation to the implementation of e-government initiatives

Interviewee: Deputy Chairman of the Council for Economic Planning and Development (CEPD), Executive Yuan.

Venue: the office of the deputy chairman

09/10/2003, 9:00-10:00

Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

The ‘Knowledge-based Economy’

1. How do you define the ‘knowledge-based economy’?

2. How do you assess the ‘knowledge-based economy’?

3. What are the decisive factors of the ‘knowledge-based economy’ in Taiwan?

4. How does the e-government initiative relate to the ‘knowledge-based economy’
Implementation of the ‘Knowledge-based Economy’ Initiative

1. In the implementation of the ‘knowledge-based economy’, what obstacles does the government face, and where do they come from?

2. Why the implementation of e-government is important to the ‘knowledge-based economy’?

Implementation and Evaluation of E-government

1. E-government is to be used as part of reinvention of public administration. In the current stage of knowledge-based economy, are there any changes in the use of e-government?

2. Do you think the Taiwanese people have adequate understanding towards e-government initiatives in relation to knowledge-based economy and e-Taiwan projects?

3. How has the government responded to public opinion through the use of e-government?

4. Do you think e-government has achieved the effectiveness intended by the government, in relation to the ‘knowledge-based economy’?
Prospects for E-government and the ‘Knowledge-based Economy’

1. What are the future steps for e-government in relation to the knowledge-based economy?

2. What kind of challenges does the Taiwanese government encounter in this stage of the ‘knowledge-based economy’?
Appendix 4. Interview themes and questions for outsourcing agencies – the one who has been outsourced for the government portal site in Taiwan

4.1. Manager in the outsourcing agency who is responsible for the implementation of the government portal site

Interviewees: Project manager, Department of System Integration, Digital United Inc. (also known as Seednet), Taiwan.

Venue: office in Digital United Inc. in Taipei, Taiwan.
17/10/2003, 11:30 -13:00; 20/10/2003, 14:00-14:30

Form: one-to-one interview; the original interview was conducted in Chinese and translated into English by me.

Marketing

22. What is the focus of the marketing strategies' of the government portal site?

23. What differences are there between the marketing strategies employed by the government and the commercial websites which your company serves?

24. What is your target group when publicising the government portal site?

25. What is the most successful marketing activity your company has employed for the government portal site?
26. In the promotion of the government portal site, has your company cooperated with other media, industries or commercial websites?

27. What are the obstacles which your company has encountered in marketing the government portal site?

**Operation, Maintenance and Management**

15. What are the decisive factors in the operation of the government portal site?

16. How can your company cooperate with your outsourcer, the RDEC?

17. Are there any difficulties in coordinating with the RDEC, as well as other government agencies?

18. How many people are responsible for the operation and maintenance of the portal site?

19. How does your company deal with email requests relating to the government portal site?

**Website Design**

1. What are the decisive factors in establishing the presence of a government portal site?

2. What are the decisive factors in maintaining the presence of a government portal site?

3. Do you think that the Taiwanese people have particular concerns over the use of
the Internet?

4. Do you think e-government users have particular needs, and how can you meet them?

5. What are the differences in website design between government websites and commercial websites?

Evaluation of E-government

5. Do you think the government portal site has achieved the effectiveness anticipated by your company and the government?

6. Among G2G, G2B, and G2C, is there any order of priority in the implementation of the government portal site?

7. Thus far, which sector has seen the greatest effect?

8. Which sector has seen the weakest effect, and how can your company improve this?

9. What are the decisive factors in the implementation of the government portal site?

Prospects for E-government

1. What are the future plans for the government portal site?

2. What resources do you think will be important if your company remains the outsourcing body for this work?
Procedure for the Online Event – ‘Calling for Your Opinions on My
E-government’

1. What were the criteria by which your team chose the articles to be published on
   the websites?

2. How did your team deal with articles which were not relevant to the topics
   suggested?

3. What did you think of the overall quality of the articles received?

4. How did your team and the RDEC respond to the opinions gathered from this
   event?
BIBLIOGRAPHY


(Accessed on 1st August, 2005)

Accenture. (2002) 'eGovernment Leadership: Realizing the Vision', Available at
(Accessed on 1st August, 2005)

ACI-FIND (FIND of Advanced e-Commerce Institute, Institute for Information Industry under the sponsor of Department of Industrial Technology of Ministry of Economic Affairs). (1998) ‘Woguo Internet Yinyong Xiankuang Diaocha’ (A Survey on the Internet Users in Taiwan), Available at


ACI-FIND. (2002b) ‘Quanzhou Dianzihuah Zhengfu di Shiyong Renkou Zhujian Zhengjia (The Number of E-government Users in the Global World Progressively Increases), Available at


Chadwick, Andrew and Christopher May (2003) 'Interaction between States and


Lee, Ming-ying, Seednet Interview. (2003) Interview with the project manager, System Integration Department, Digital United Inc (aka Seednet) in the office of System Integration Department. 17th October, 2003.


Lee, Xiao-feng (2002) Liushi Fenzhong Kuaidou Taiwan Lishi (Brief Reading of the Taiwanese History in 60 Minutes). Taipei: Yu Mountain Publisher.


Argentine Experiment', *Comparative Politics*, 28: pp465-476.


Office of Science and Technology and the Wellcome Trust (2001) 'Science and the Public: A Review of Science Communication and Public Attitudes toward Science in


Pan, Yan-dian (1999) ‘Woguo Zhengfu WWW Wangzhan yu Zixun zhi Tantao’ (Research on Government Websites and Open Information in Taiwan), M.A. diss., Tunghai University, Taiwan.


RDEC. (2003c) An Introduction of GSN. Taipei: Executive Yuan, Taiwan.


Tseng, Shu-Fen, Chi-Kuang Chen and Chyi-In Wu (2003) Jiushiyi Niandu Taiwan


Neirong Tan Minzhu zhi Jiangou' (Founding the Democracy Contents by Checking "Civics and Morality" Textbook), Gongmin Xunyu Xuebao (Bulletin of Civic and Moral Education), 7: pp295-318.


Education.


