Assignment A
Tasks 1-4 from Handout

Prepared for
Dr. Steven D. Zink, Ph.D.
2004 Summer Institute
Faculty in Doctoral Program
Nova Southeastern University

Prepared by
Derek J. Sedlack
Doctoral Student, Nova Southeastern University
School of Computer and Information Sciences

January 8, 2005

Task 1

Some view involvement in information policy, particularly in the government or public sector, as a means of asserting control over information. Describe the subtle, but important differences between "control of information" and its "management" or "organization."

Understanding the role of governmental interests in information, the idea of information and control over information management is clearly rooted in national security and global economics. A governmental body must ensure the survival of itself and those that put it in power and maintain its control of the body it governs. The elimination of compromising situations is self-serving and vital to the survival of government control and those it would govern. Scope is another key difference; it is impossible to manage millions of individuals or thousands of organizations, but controls can more easily be developed, inserted, and governed. The monopolistic practices maintained by the Bell System, created by the 1934 Act, were a display of control over the telecommunication industry to ensure that the most far reaching areas of the country had access to phones, a feat of management that the government could not attain. The balance between control and management is razor thin, proven by the apparent failure of the 1934 Act, and many questioning the ability of such a strained governmental power to complete such a daunting task efficiently (Gasman, 1998; Browning, 1994; Breidenbach, 1997; Global Internet Policy Initiative, 2002) creating conditions that either make it impossible for competition to duplicate, or too cumbersome to access (Kline, 1996).

Another method of distinguishing between control and management describes radical planning differences evident in policy vs. business initiatives, “a great deal of effort is devoted to developing policy solutions to [current social trends] without providing any detailed normative account of what, exactly, is wrong with [the trends]” (Rooksby & Weckert, 2004, p. 32). The

overzealous nature of policy can be seen in the sweeping legislation surrounding electronic data and record-keeping and creation of 600 bills designed specifically targeting identity theft, none of which address the release of medical information (Garfinkel, 2000) and most are based on knee-jerk reactions that can be traced "back to the headlines" (Davis, 2003, p. 1). Even the U.S. General Accounting Office (USGAO, 2003, p. 3) conceded that national policy lacks the insight and preparation required to be effective, "[the] approach to improving records management does not include [effective] provisions" and "as a result, valuable government information may be lost". Information policies are largely based on the establishment controls to ensure the proper use of information are derived mostly from experience instead of educated, calculated decisions. The meltdown of WorldCom provided legislation for acceptable accounting practices, instead of allowing the industry to regulate itself. A new wave of legislation is bound to appear reflecting a public companies ability to leverage and market hedge against its own stock position, such as Dell and Microsoft (Jennings, 2004).

The challenges about E-voting have entailed the security of the information on the ballet itself, not the management of the system: means of transfer, calculation, or system stability (Boutin, 2004). Simply guiding transactions, or managing information through policies, will not be successful with an "intricate, multilevel and global nature" and that the policies should be guided by the acceptance of a pluralistic and hierarchical approach (Braman, 1989, p. 242). Kapor (1993) surmises that the proper role of government policy is based in macroeconomics, focusing on promoting economic growth, not the control of access, use, and content. While many polices are shaped by private juggernauts, public policy recommendations and strategies can be positively crafted through foundations and other organizations that "understand the situation at hand" (Kapor, 1993, p. 2). Organizations that manage information have the luxury of creating

"new rules" that suit their needs, not establish controls that govern the industry – a governmental chore, and some analyst comments reflect organizational thought vs. larger policy controls, "I don't give a rat's ass what Wall Street thinks" (Jennings, 2004, p. 166).

The practiced difference between control and management or organization of information relies heavily on scope. Strategically the government should view policy from a national and global scale, developing those which will guide or enforce strategic economic directives or issues of national security. A number of polices are derived from past transgressions and are, perhaps, implemented more quickly than normally accepted prudence out of political agenda instead of national concern. Informational controls should be developed from within glass houses that complement understanding and effectively relate to all stakeholders, as Johnson (2004) suggests, instead of being derived from a few special interest groups or re-election campaign initiatives. The management of information must comply with control policy, but should also be implemented on behalf of the informant, not the informed. Tighter controls on information policy will protect the masses from isolated management decisions concerning a microcosm of individuals designed to produce wealth, but expanding fiduciary duties to include information, which requiring a level of ethics unseen for decades, may reinstate public trust in business.

Task 2

What are some possible impacts on relationships between citizens and governments due to ubiquitous, intelligent networking and its various implications?

There seems to be a dichotomy that must be solved before communities as a whole can adopt an information society: should the foundation surround human rights at the center, or base the evolution on business needs (McIver, 2004). An information society developed for the need of business would look much like that of America, few laws surrounding the protection of information, many laws establishing access rights. McIver (2004) sites organizations and tasks forces with intent to benefit all of mankind: the World Summit on the Information Society, United Nations, and the Digital Opportunity Task Force, but the transparency of business influence in culture and policy both in the United States and globally do not compel the reader to believe that human rights are the basis for any information societal modeling. Government must protect business as the source of innovation and business should endear their consumers' rights as stakeholders, but the increasing digital divide bars the establishment of holistic, functional information society in more wealthy, developed nations, much less in the impoverished countries around the globe.

There is an interesting irony when organizations such as the Association for Progressive Communications (APC) and the Institute for Global Communications (IGC) were founded partly on the basis that information and communication technologies could be used effectively as tools to respond to the injustices around the world, such as the invasion of this very same technology. Rooksby & Weckert (2004) noted that common definitions of the term "digital divide" connotate moral or social undesirability, economic overtones, or imply a level of cultural underdevelopment. Should an inability to view legal documents from their living room doom a

citizen to a life of inequality or ineptitude? As information societies become even more entrenched with the ubiquitous computing of intelligent appliances inter-networked with business, a new divide will be created between the citizen and the technology itself. The differentiation between policy makers and business may be fused as one simply referred to as *Enablers*, those that proliferate information societies not for mankind betterment, but on grounds of wealth and power accumulation. Tapscott & Agnew (1999) found that the cost and complexity of business is falling and a farther reaching economy should result. But global policies and a lack of universal governmental control add a new layer to the economic equation, enforcing the Coase theorem instead of destabilizing it.

Technology provides new elements of risk: speed and consolidation. Boutin (1999) wrote that many voters should be worried about casting electronic votes because of insider manipulation and audit loopholes. Equally important, access control can only be created through a personalized trail that ultimately may eliminate voting anonymity, creating additional strain between citizen and government. Citizens feel that information obtained and controlled by the government, and the private sector, can be used for illicit or unacceptable means, creating a rift between government efficiency and citizen privacy that is difficult to marry. Morton & Zink (1991) capture perfectly the ideal that should lay as foundation for any information society, "information is seen as too valuable to be left unmanaged…how to manage the people's information without precluding the people's access to it" (p. 312). Rooksby & Weckert (2004, p. 33) quote Kretchmer & Carveth "useful solutions require content relevant to people's lives to motivate underserved groups", but focusing on *underserved groups* is exactly what should not happen. Rooksby & Weckert (2004, p. 43) illustrated the moral obligation of society to provide digital access to all, qualifying deprivation as an "inequity and abridgement of liberty" and infer

that governments should be responsible for reducing the social inequalities derived from such divides. If the government is held accountable for ensuring digital access, how can citizens without feel anything less than cheated out of this entitlement instead of missing out on equally available opportunities? Do governments have a moral obligation to citizens without access to toasters communicating with refrigerators and should everyone be subsidized with hand-held MP3 playing cellular telephones? Relying on the government to provide anything more than the rules and regulations will breed contentment in the citizenry, like the universal access charges omnipresent in the telecommunications sector.

Many (Melody, 1996; Rooksby & Weckert, 2004; Morton & Zink, 1991; Chinn & Fairlie, 2004) refer to an information society relating more to access of knowledge bases such as scientific research, educational studies, and governmental documents than to the technology itself. This relates more directly with the idea of "life, liberty, and the pursuit of happiness" framed in the Declaration of Independence and many of the laws created prior to the age of technology. The ubiquity of computing will continue to infiltrate citizens' privacy and may soon require special laws reflecting the collection and dissemination of personal information gathered from purchased household goods. Radio frequency identifiers are becoming more cost-effective and could be shipped with every product purchased through retail outlets in the next decade. Coupled with the integration of government information systems and personal digital movements (Carnivore), citizens will have reason to suspect the government's actions – even if drawn from noble motives. The United States Department of Commerce (USDOC, 1999) paints the Internet and information access a necessity that must be obtained by all citizens or educational, economic, and social advancement will cease. A grandiose notion and naive implication comparable to automobiles or personally owned domiciles; while these are all important to allowing societal

advancement and personal pride, it would be reckless abandon to believe that the government should ensure that all citizens be entitled to any one of them. Setting the mindset that technology is a right similar to freedom of expression sets a dangerous notion that future innovations belong to all of mankind. While many philosophers cherish that sentiment and Benjamin Franklin embodied its application, it is impractical and even dangerous to let a modern undereducated public believe in the social application of technological advancement.

Task 3

In what ways can culture shape information policy and the policy process? Be sure to cite examples to illustrate your points.

The most obvious way for culture to shape policy is to bend the gray areas far beyond what society will allow and sometimes even what the law will allow, such as WorldCom, Tyco, and Enron, only a few of a large number of recent examples. Massive databases currently compiled by Internet information gatherers like Doubleclick and Gator, compiling each click and address visited during each moment spent online without worrying about privacy issues or policy controls to inhibit their newly formed method of stalking, following the legal and moral issues documented by Wiencek (2004). The digital economy is like most innovations, law and policy not only take time to craft, but longer to hone properly into a tool useful to society. A number of state anti-spam laws, such as the CAN-SPAM Act, were crafted largely resulting from studies showing that large percentages of Email were spam – the Washington State Attorney General's office (2004) reported 40% and growing on their web site. A recent a court decision struck down the Maryland law sighting that the unconstitutional law directly violated the Chamber of Commerce Clause of the U.S. Constitution and that the State lacked jurisdiction over cross-border communications, but the defendant's victory was empty because additional suits have effectively halted business (Perez, 2004). Marketing through spam has become a global phenomenon and policies are only now shaping effective methods of control, much like the sharp teeth afforded the anti-fax law, $11,000 per incident with the ability to litigate.

The difficulty of establishing territorial borders on the Internet poses serious issues of culpability and the effects and legitimacy of law enforcement powers (Johnson & Post, 1996) that balance on the narrow precipice of revitalization and libertarian threat (Kline, 2996). While

Kapor (1993) believes that government intervention in the Internet should be minimal, he does believe that protecting public interest [through policy], promoting standards, and funding research are vital roles that cannot be left to the private sector. The 1929 market crash created a wave of security legislation; the Telecommunications Act of 1934 redefined the Bell System's punishment of competitors with strong monopolistic tactics; the United Nations 1948 formation over growing concerns surrounding global human rights violations, and the 1999 Millennium Declaration was drafting after the Internet had invaded developed and poor countries with equal fervor and tenacity. Policies have a history of taking hold long after the damage is done, or only after the general public is damaged sufficiently. Many scholars (McIver, 2004; Brennan, 2004; Jennings, 2004; Johnson, 2004) believe that policies and infrastructure should precede the conditions that currently cause their hasty development through societal perspective and global ethics. But this would require a level of governmental understanding that Kline (1996), Melody (1996), and the U.S. GAO (2003) itself appear doubtful can be reached considering the abundant failing electronic initiatives in full force today.

Rooksby & Weckert (2004) note that culture, context, and personal experiences are extremely important to understand the affect of information and communication technologies (ICTs) and site several sources supporting this thought with demographics and studies. This method supports culture shaping policy instead of strategy because statistical gathering and analysis take time, sometimes decades to understand, leaving a wake of misfortune or irreversible invasions of personal privacy to the masses that can least afford the effort. Brennan (2004) also noted that second level efficiency effects of information technology, personal contact methods and interdependence, are hard to anticipate and the systematic changes are hard to undo and may become magnified by the impact of software errors. Balancing the need to leverage future trends

and insulate invasive techniques and technologies may be the key to developing useful information policies in the future. It may be possible to look into the past to determine the future, as Jennings (2004) found with the "new rules" surrounding Internet business evaluations using EBITDA instead of the proven method of measuring earnings *after* expenses. Only after the largest bankruptcy case in U.S. history did companies realize that sufficient policies existed to measure corporate status. Until nations begin to craft global policies with the human race as their citizenry, it will be difficult to form effective information policies before they are shaped by cultural events.

Task 4

Is the Digital Divide a legitimate concern in the U.S. or merely an outgrowth of partisan politics?

Similarities exist between the concern over the Digital Divide and the relationship between citizens and the government, but this paper will deal with the relationship between organizational transparency and its impact on citizens as exemplified by Johnson (2004).

Rooksby & Weckert (2004) noted that common definitions of the term "digital divide" connotate moral or social undesirability, economic overtones, or imply a level of cultural underdevelopment. Brennan (2004) found that unintended consequences coinciding with, and emanating from technology easily out-number the benefits derived from the same innovation. McIver (2004) determined that social impacts caused by technology are so vast and underestimated that a huge percentage of the global population are being ignored, and thus, ill-equipped to contend with future enterprises. Melody (1996) defined the framework of technology in purely scientific form and related the massive paradigm shift required by society to one of social concern similar to McIver. All of these perspectives are important in understanding the brunt transformation information technologies are making on the economy, businesses, and personal lives.

While the Rooksby & Weckert definition may be proximate to governmental and social context, the implication is simplistic and shortsighted at best. The "first level efficiency effects" (Brennan, 2004) contain highly focused, measurable features of using technology that can be extrapolated to the populous. Ease of access equates to wireless telephones and credit card transactions; revision of work transforms PTA agendas and home owners association memos; communications are inundating with cable news networks, weather channels, and seven day

forecasts; leverage of usefulness and repetition allow drivers license registrations to be conducted online without filling out new forms each year. Now try and imaging households struggling to survive without these luxuries in a society so bound by them that credit cards are required to rent home videos and cars and the number of daily tasks becomes overwhelming with an electronic organizer beeping 10 minutes before the next dental appointment. Personal stakeholders now include children's educational establishments, retail chains for groceries, home repair products, insurance companies, and banks, but in a much different light then before the digital divide began to widen.

Johnson (2004) found private organizations use of technology to organize and affect policy in cases of whistle blowing, political blunders, and environmental activism require citizens of every country to take a much more active role globally, if only because of the increased ability and effectiveness provided through technology. Brennan (2004) found unintended consequences: lack of data security, deterioration of interpersonal relationships, and the impact of software errors, require every citizen to be more aware of the potential dangers inherent in the system and oblige them to ensure the accuracy and proper use of information by the government and private organizations. The ability to collaborate effectively online will demand the technically savvy employ usurp the undereducated and digitally divided (Tapscott & Agnew, 1999). Even the most traditional business now demands technological knowledge with the proliferation of smart card readers, networked printers, and electronic data keeping into the smallest mom & pop shops. Politics must change the message from that of coercion to adaptation if this country hopes to infuse the current and future generations with a new set of essential business skills. Businesses and the government are continuously finding new methods of providing more accurate and timely information to stakeholders (Johnson, 2004), allowing for

better business decisions to be made professionally and personally to those with means of access. Digitally inept or unavailable citizens will not be able to partake in such vital elements of the decision making process, putting the entire country at a disadvantage.

Even as the prices of electronics continue to fall, the rapid evolution of the technology requires a constant state of flux that quickly alienates the poor and rural citizens of the country. The FCC has demanded the transition of television transmission, the most popular source of news and sports information, from analog to digital by 2006. More than 98% of all Americans have television service and more than 58% of the poorest have cable [that number could increase if allotted by income percentage] (Gasman, 1998), but can all of these households afford to convert every television in the home to one equipped to handle digital transmissions? Universal access fees tied to telephone bills are now supplying the Internet infrastructure in libraries because so many people lack simple connectivity, let alone the expensive Microsoft software required to remain compatible with the business community. Providing free access is not the solution, changing the view of technology from that of enabler to that of essential is the only way that the government will bridge the gap present in the U.S. If such a large percentage of Americans have cable television, the same numbers could equally possess Internet connected computers. A Scarborough research study reported by BizJournal (2002) showed that national cellular telephone ownership had reached more than 60% with monthly bills in excess of $50. A quick trip to http://www.dell.com yields systems as cheap as $14 per month including software and the average advertised price for Internet dialup service ranges between $10 and $20 per month. Adding high-school or college grade students into the monthly average would easily exceed DSL or cable modem-level service.

Braman (1989) found that little investment was taking place in international technological infrastructure because of a lack of verifiable return on investment. There are serious challenges facing countries less developed than the United States and Europe with computer and Internet penetration rates as low as $1/100^{th}$, including areas perceived to be techno-literate like India (Chinn & Fairlie, 2004). Also important are the findings that political freedom is a digital barrier in the APEC region, a persistent indicator that those countries will continue to fall farther behind as technologies advance in the Western world. These barriers will likely prohibit the penetration of U.S. companies through expansion or acquisition causing additional suppression of the assimilation of technology and increased expansion of the Global Digital Divide. The inhibiting factors in the United States appear to be largely based on the perception of technology, a limitation that could be overcome through policy, but countries that lack the basic freedom of choice will soon find interaction with the outside world too different to conduct.

Reference List

Barlow, J. P. (1996). *Declaration of Independence in Cyberspace*. Retrieved from the World Wide Web August 1, 2004 from http://homes.eff.org/~barlow/Declaration-Final.html

BizJournal. (2002). *Austinites own more cell phones than national average*. Retrieved from the World Wide Web September 20, 2004 from http://www.bizjournals.com/austin/stories/2002/03/18/daily14.html

Boutin, P. (2004, June). Is E-voting safe? *PC World, 22*(6),121-125. Retrieved from the World Wide Web August 1, 2004 from http://www.pcworld.com/news/article/0,aid,115608,00.asp

Braman, S. (1989). Defining information: An approach for policy-makers. *Telecommunications Policy, 13*(3), 233-242

Breidenbach, S. (1997, November). Stuck in the middle: The FCC, formed to regulate a monopoly, now charged with championing competition: It's failing. *Network World.* Retrieved from the World Wide Web on July 9, 2004 from http://www.nwfusion.com/news/1997/1110fcc.html

Brennan, L. L. (2004). *The perils of access and immediacy: Unintended consequences of information technology*. Social, Ethical and Policy Implications of Information Technology. In L. L. Brennan & V. E. Johnson, chapter 3, pp. 48-58. Hershey, PA: Information Science Publishing.

Browning, J. (1994, September). Universal service: An idea whose time is past. *Wired, 2*(9), 102+. Retrieved from the World Wide Web on July 9, 2004 from http://www.wired.com/wired/archive/2.09/universal.access.html

Chinn, M. D., & Fairlie, R. W. (2004). *The Determinants of the Global Digital Divide: A Cross-country Analysis of Computer and Internet Penetration*. Santa Cruz, CA: Center for Global, International and Regional Studies. Retrieved from the World Wide Web August 1, 2004 from http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1024&context=cgirs

Davis, J. B. (2003, February). Sorting out Sarbanes-Oxley. *ABAJournal, 89*, 44-49.

Garfinkel. S. (2000). *Database Nation: The Death of Privacy in the 21st Century*. Cambridge, MA: O'Reilly and Associates.

Gasman, L. (1998, June). Universal Service: The new telecommunications entitlements and taxes. *Policy Analysis: CATO Institute*. Retrieved from the World Wide Web on August 30, 2004 from http://www.cato.org/pubs/pas/pa-310.html

Global Internet Policy Initiative. (2002, May). Best practices for telecommunications reform. *Washington: Center for Democracy and Technology & Internews.* Retrieved from the World Wide Web on July 9, 2004 from http://www.internetpolicy.net/practices/telecomreform.pdf

Jennings, M. M. (2004). *A contrarian's view: New wine in old bottles: New economy and old ethics: Can it work?* Social, Ethical and Policy Implications of Information Technology. In L. L. Brennan & V. E. Johnson, chapter 10, pp. 159-182. Hershey, PA: Information Science Publishing.

Johnson, V. E. (2004). *Living within glass houses-coping with organizational transparency.* Social, Ethical and Policy Implications of Information Technology. In L. L. Brennan & V. E. Johnson, chapter 8, pp. 130-140. Hershey, PA: Information Science Publishing.

Kline, D., & Burstein, D. (1996, January). Is government obsolete? *Wired, 4*(1), 86+

Kapor, M. (1993, July/August). Where is the digital highway really heading? The case for a Jeffersonian information policy. *Wired, 1*(3), 53+

Melody, W. H. (1996). Toward a framework for designing information society policies. *Telecommunications Policy, 20*(4), 243-259

McIver, W. J., Jr. (2004). *Global perspectives on the information society*. Social, Ethical and Policy Implications of Information Technology. In L. L. Brennan & V. E. Johnson, chapter 1, pp.1-28. Hershey, PA: Information Science Publishing.

Morton, B., & Zink, S. D. (1991, Summer). Contemporary Canadian federal information policy. *Canadian Public Administration, 34*(2), 312-338. Retrieved from the World Wide Web August 1, 2004 from http://webctce.nova.edu/DISS_0770_FL1_15145_200515/770%20Info%20Policy%20Inst.%202004/morton-zink.pdf

Perez, J. C. (2004). Judge Rules Maryland Spam Law Unconstitutional: Lawsuit against alleged spammer is dismissed. *PCWorld*. Retrieved on December 20, 2004 from the World Wide Web from http://www.pcworld.com/news/article/0,aid,118977,00.asp

Rooksby, E., & Weckert, J. (2004). *Digital divides: Their social and ethical implications*. Social, Ethical and Policy Implications of Information Technology. In L. L. Brennan & V. E. Johnson, chapter 2, pp. 29-47). Hershey, PA: Information Science Publishing.

Tapscott, D., & Agnew, D. (1999). Governance in the digital economy. *Finance and Development 36*, 34-37

Thibodeau, P. (2001, October 8). Foreign laws alter IT privacy policies. *Computerworld*. Retrieved from the World Wide Web August 1, 2004 from http://www.computerworld.com/industrytopics/retail/story/0,10801,64563,00.html

Washington State Attorney General. (2004). *Junk Mail*. Retrieved on November 24, 2004 from the World Wide Web from http://www.atg.wa.gov/junkemail/

Wiencek, D. (2004). *Ethical challenges of information systems: The carnage of outsourcing and other technology-enabled organizational imperatives*. Social, Ethical and Policy Implications of Information Technology. In L. L. Brennan & V. E. Johnson, chapter 9, pp. 141-158. Hershey, PA: Information Science Publishing.

U.S.Department of Commerce. National Telecommunications and Information Administration. (1999). *Falling Through the Net: Defining the Digital Divide*. Washington: The Department. Retrieved from the World Wide Web August 1, 2004 from http://www.ntia.doc.gov/ntiahome/digitaldivide/

U.S. General Accounting Office (USGAO). (2003, July). *Management and Preservation Poses Challenges*. (GAO-03-936T). Washington: The Agency. Retrieved on October 12, 2004 from the World Wide Web from http://www.gao.gov/new.items/d03936t.pdf