

Information and Managerial Decision Making: Investigating E-mail and Organizational Culture

Brian D. Otte

Capella University

Table of Contents

| | |
|--|----|
| Title Page | 1 |
| Table of Contents | 2 |
| Abstract | 3 |
| Introduction | 4 |
| Discussion | 5 |
| E-mail stored as filing cabinet | 8 |
| E-mail used as a production line | 10 |
| E-mail as a tool for distributed computing | 11 |
| E-mail search strategies | 13 |
| E-mail as a communications genre | 15 |
| Training users and instilling e-mail culture | 16 |
| Cultivating culture in e-mail through the work environment | 18 |
| The culture of privacy in e-mail | 19 |
| Conclusion | 20 |

Abstract

Organizations use information to make managerial decisions while conducting business. Information Systems which enable the flow of information through organizations provide the mechanisms to efficiently deliver information to those who need it. Nearly ubiquitous in availability, e-mail is taken for granted as a communications mechanism. Organizational use of e-mail as an Information System is analyzed through a review of currently published research investigating organizational use of information in context of e-mail. An investigation of e-mail with respect to managerial decision making finds that managerial decisions affect organizational culture. Research is found lacking detailing the specific methods an organization can take to manipulate an organization's culture through managerial decisions with respect to e-mail work methods and control mechanisms.

Introduction

Information and managerial decision is presented by Swanson and Ramiller (1993) as a topic investigated by Information Systems (IS) researchers. Researching published research in the five years between 1987 and 1992, Swanson and Ramiller present attributes of this published research in the IS field, indicating that Information and managerial decision making is a topic within the IS field. An organization which effectively uses Information to make managerial decisions significantly enhances an organization's productivity through efficiency (Schneider, 2004). A review of recently published research is conducted, the results are presented, and recommendations are made concerning Information and managerial decision making.

Organizations make choices concerning the types of products they wish to sell, the way they produce that product, and the support infrastructure they use to support the flow of information within the organization. While most organizations are not directly driven by profiting from handling information, the methods used to manage the organization's information factor in their profitability (Schneider, 2004). An organization, when presented with choices, decides what Information System they use and also how they use an Information System. The goal is to use the best Information System and effectively use the technology which leads to an efficiency which the organization's competition can not realize. Some organizations are mandated to manage the flow of information within their organization (George, 2003); however, even organizations which are mandated to manage the flow of information still have choices in which system to use and the methods with which to use the systems.

The scope of this literature review needs further refinement because the topic of Information and Managerial Decision making is too wide and cannot be addressed properly

within this literature review. Therefore some boundaries are defined and observed when conducting this literature review. Hoffer, George, and Valacich (2008) present two views of technology within an organization which are Organizational Systems, which interact with customers to run a business in real time, and Informational Systems, which interact primarily with managers, business analysts, and customers. Hoffer et al. continue by presenting that Operational Systems run the business on a current basis, whereas Information Systems support managerial decision making. One boundary imposed on this literature review is to limit the scope to Information Systems, as defined by Hoffer et al., and deal with systems which support managerial decision making.

An Information System, as presented by Hoffer et al. (2008), is still too wide in scope to effectively manage in this literature review. Therefore one system which is the most prevalent form of electronic communication on the Internet (Nie, Simpson, Stepanikova, & Zheng, 2005), and nearly ubiquitous in all organizational Information Systems is e-mail. E-mail is the specific Information System used for this literature review to investigate Information and managerial decision making. Managerial decision making, as presented through this literature review, is pivotal in exploiting the benefits of an e-mail system. E-mail use within organizations can enable or hinder an organization's information and managerial decision making. This literature review investigates the current published research associated with e-mail within an organization with respect to Information and managerial decision making.

Discussion

Information is disseminated through an organization through many different methods: face to face communications sometimes called meetings, video conferencing, phone calls,

bulletin boards, and e-mail. The mechanisms organizations use to communicate are as varied as the organizations themselves. Not only does e-mail allow information to flow within organizations, e-mail allows information to flow in and out of the organization.

An organization may adhere to specific processes to gain a competitive advantage which is typically called a business strategy. E-mail helps members of an organization develop a shared view of an organization's strategy (Fussell et al., 1998). A business strategy manifests itself through Information Systems by how organizations choose to invest in these systems. An example of some generic business strategies are low cost strategy, differentiation strategy, and niche or focus strategy (Ward & Peppard, 2002).

One method that organizations use to differentiate themselves from their competitors is through sharing information about their business with their customer. Information is what an e-mail system delivers. One goal of this literature review deals with the methods organizations use e-mail within their organization. As a corollary, this research also presents reasons why organizations might want to adhere to some of these methods. The strategic use of e-mail as an Information System is also presented through an alignment of the business strategy and the Information Systems strategy. The low-cost strategy is investigated, as enabled by e-mail through a distributed work environment. Before this is addressed directly, some foundational information is presented which builds to utilizing e-mail in a distributed work environment obtaining alignment with the low-cost strategy.

Information is an enabler for an organization and can be used to differentiate itself from the competition. Value chain analysis allows an organization to analyze its activities and determine the value each activity adds to the organization through its operations thus defining its

performance (Hoffer, George, & Valacich, 2008, p. 104). Communication is the pivotal component which links these activities to each other. Ward and Peppard (2002) discuss linking information and the value information brings to the business when they state that “Delivering value to the business is the key rationale behind an information management strategy—to add value by exploiting information as a core business resource” (p. 475). Effectively applying relevant information to the business directly impacts the bottom line and factors into the success of an organization.

Conversely, ineffective use of information due to poor communication within an organization is mismanagement of information, which opens the door for competitors as Ward and Peppard discussing competitive advantage state that “Competitors will soon catch up through imitation or even overtake the organization either through imitation or by deploying a newer and cheaper technology...” (p. 605). While one organization is ineffectively using its information, another competing organization effectively uses communication giving them a competitive advantage. Between effective use and ineffective use of information lies an area where managers made the choices which tailors an information system to enable an organization to gain a competitive advantage or conversely miss the opportunity to effectively apply the appropriate strategy. The managerial decision also creates an organizational culture which provides an environment which is conducive to a positive communication environment.

Timely, accurate, and effective information is required for people to make good decisions. Finding information in a timely manner enables more time to be spent on thinking, and less time searching for information. Thinking about the information is productive while searching for information is not productive. E-mail allows an efficient method of finding

information. Research presents user methods which allow quicker access to the information they are looking for. Before investigating how e-mail is used to efficiently search for information, an understanding of how users store information is investigated.

Research investigating e-mail presents three constructs exhibited by e-mail within organizations. Ducheneaut and Watts (2005) find that e-mail research examines e-mail used as a filing cabinet, a production line, and a communication genre (p. 11). The view of e-mail in light of these three constructs is investigated in the next sections.

E-mail stored as filing cabinet

According to Ducheneaut and Watts (2005), research presents a view where users store e-mail within folders inside which contextually related material is placed. E-mail research detailing the storage of information as a filing cabinet simply implies that the user has contrived a system which is context based. The method users use is either time or content focused and may be a mixture of either (Ducheneaut & Watts, 2005). The user sets up a series of folders which allow e-mails, relevant to the title of the folder, to be placed inside of that folder. When the user needs to find information the appropriate folder is accessed and the information found within the folder.

This method of storing e-mails requires the appropriately labeling of e-mail. According to Ducheneaut and Watts (2005) “This later helps people filter, sort, and prioritize messages that are addressed to them and it also helps them find useful messages...” (p. 15). However, access to all of this data requires that users are not inundated by the data, and are able to make use of the tools presented such as filing e-mail within a structure, or labeling mail as appropriate for later recall. Individuals who are overwhelmed by the sheer volume of information will find it difficult

to process the information in a timely and effective manner. Ducheneaut and Watts state that “Consequently, people are reluctant to file information away either because they cannot decide how to categorize it or because they are not confident in their ability to retrieve it later” (p. 16). This example shows the beginnings of an issue with an organization being able to effectively use the information which it has available. Managers must emplace some system of controls which ensure that users are using the appropriate methods while managing their e-mail. These managerial controls are given consideration later in this literature review.

Before any consideration is given to implementing managerial controls, organizations need an understanding of how people remember and prioritize. Storing e-mail provides a method which efficiently places an object allowing for retrieving the object. But how does a user know or remember what they are looking for, and what, if anything, can an organization do to enable this information and managerial decision making? According to Ducheneaut and Watts (2005) who suggest that specific attributes surrounding the e-mail is what enables users in linking memory with the e-mail. These attributes are defined as “...the meaning of their content, contextual information such as what they look like, what one was doing at the time, associated concurrent events, and the time of message receipt or composition...” (Ducheneaut & Watts, p. 16). This view presents a contextual method to remember an e-mail and its content, and places the e-mail within a context which allows the users to associate the e-mail with something.

Another view addresses the users’ view of technology in remembering. Vessey and Galletta (1991), who conduct research into cogitative fit, relate the user’s ability to problem-solve or make decisions based on the fit between the technology and task as viewed by the user performing the task (Vessey & Galletta, 1991, p. 63). Vessey and Galletta conducted research

using graphs and tables determining that “Our intuition quickly allows us to see a meaningful distinction between graphs and tables” (p. 67). The better the fit between the technology and task, as viewed by the user, enables a quicker and more meaningful distinction between information. The research presents a view that the user must view a good fit between the technology and the task to allow intuition to “...see a meaningful distinction...” (Vessey & Galletta, p. 67). These distinctions allow timely decisions to be made with a correct technology fit.

These introductory examples show that e-mail is an enabling form of information. Organizations can adapt this information to enable their organization through training for users to employ effective methods to manage their e-mail. These training activities might include e-mail stored as a filing cabinet, proper labeling of e-mail, aiding users by organizational remembering, and formatting e-mails appropriately by titling e-mails with uniform and organizational specific information.

Thus far, this literature review has presented a view of using e-mail within an organization. However, one particular use of e-mail, which enables a paradigm shift in the methods organizations do business, is through use of e-mail as production line. A presentation of what research discusses about e-mail as a production line is presented next.

E-mail used as a production line

E-mail research into use as a production line infers that task process notifications are sent through e-mail to notify the status of the task. This is similar to a physical production line where the item is transported to the next processing step indicating that the task is ready for additional

processing. Relevant information may be contained within the e-mail, or the e-mail may simply contain a notification that *tags* the next user in line to proceed with manipulating the process. Ducheneaut and Watts (2005), discussing e-mail as a production line, state that "...e-mail as a production line theme examines messaging technology as a facility for work production within groups, across individuals in terms of their role as members of the group" (p. 28). This production line method of information is one mechanism where management can impose controls on user activity.

The user has been placed into a task oriented process and becomes part of the process by management using e-mail as a production line. According to Ducheneaut and Watts research indicates that management controls using e-mail as a production line also measures managerial effectiveness. This infers that managers use e-mail to monitor a process, and the process itself can monitor the effectiveness of the manager. The use of e-mail as a production line presents possibilities for work within a distributed environment which may assist an organizational strategy of low-cost.

E-mail as a tool for distributed computing

Organizations may find that the production line use of an e-mail system allows their organization to work in a distributed work environment. The functional necessities which enable a distributed environment are: a user needs access to e-mail, and a user needs to have access to the relevant task related artifacts in order to accomplish their task. Accompanying distributed computing, there are some organizational culture issues which might affect the distributed nature of the work environment which an organization should be aware of which current research addresses.

Belanger and Collins (1998) discuss working in a distributed environment with respect to an organization's culture. Belanger and Collins believe that commitment and loyalty are two factors which affect culture in a distributed work environment. Both of these attributes are difficult to convey through a distributed work environment like an e-mail production line. Belanger and Collins (1998) state "The technology for distributed work is available, but the social and psychological barriers have to be addressed for successful deployment of the distributed work structure" (p. 150). This is one reason managerial decision making may disapprove of e-mail as a production line enabling distributed work environments.

Although the production line use of e-mail might appear to directly lend itself to the use in distributed work environments Belanger and Collins (1998) citing Gordon believes that if the task has high communication utilization, duplication of work may result which will lead to increased errors. This information suggests that the nature of the distributed work environments is best comprised of functions which have low communications requirements (Belanger & Collins, p. 146). Therefore, organizational tasks which are best suited for a distributed work environment, which are enabled by e-mail as a production line require low communication utilization.

Should a suitable task present itself for a distributed work environment users will need the ability to find information quickly. As previously mentioned, high dependence on communication utilization is problematic for a distributed work environment (Belanger & Collins, 1998, p. 146), so how can information and managerial decision making enable better communication? Management can ensure that information and the search of information are enabled through the appropriate software. One method uses e-mail as a filing cabinet, but not all

users think alike, filing their e-mail with an identical contextual method. Additionally, what is perfectly natural to one user might be disorganized to another. Therefore, a distributed group environment working with a filing cabinet e-mail system may be viewed as no system at all. To address the issue of a distributed group environment, Belanger and Collins (1998) state "...that there will be a need for groupware that supports the kind of frequent exchanges required, between both the entire team (as a substitute for meetings) and individuals (as a substitute for less formal interactions)" (p. 146). Even though almost all organizations have e-mail, the right e-mail system is required to enable a distributed work environment. Through a long term strategy an organization can ensure that an appropriate and enabling system will enable collaboration in a distributed work environment.

A need exists for users to find information utilizing specific search strategies in a distributed work environment. The primary reason for storing e-mails in a methodical manner is to ultimately find the e-mail when it is needed for referencing. The ability to find e-mails quickly, through recent software indexing improvements is beginning to become easier as systems offer the ability to index both the e-mail and any attachments which the e-mail might contain. The user can then conduct a keyword search and discover the relevant information. However, how does the user know which search strategy or keywords will yield the appropriate information?

E-mail search strategies

The organizational culture, which management instills, needs to ensure that contextual information is properly embedded into all e-mails the organization creates. One aspect of e-mail which contains important information is the subject information. This is similar to a title of an

academic journal, as it identifies the contents of the message. Rumrill, Fitzgerald, and Ware (2000) discuss the importance of the title of an academic article due to its importance related to keyword searches. Similar to a keyword search for research material, e-mail users are going search for keywords which are in the title when they conduct searches. The composers of these e-mails, similar to the needs of academic articles as presented by Rumrill, Fitzgerald, and Ware, need to incorporate subject keywords so that keyword searches work as anticipated.

Proper labeling of e-mail is not only important for searching, but it is also important for the receivers of e-mail to assign an initial priority when an e-mail first arrives. The title, in addition to the sender, signals the priority the receiver will assign to the incoming e-mail. Ducheneaut and Watts (2005) believe that the sender ought to appropriately pre-label the e-mail subject for the receiver. This contextualizes information for the receiver as the research of Vessey and Galletta (1991) suggests, and enables a better cognitive fit so that the receiver can understand immediately how important e-mail is.

Organizational efficiencies can be gained if the whole organization is trained in storing e-mail and properly titling e-mail. This enables users to remember contextual attributes about the e-mail. When users need to find an e-mail, methods gained during organizational training will enable different methods in their quest for finding e-mail. Research addresses methods users use to search for information. Lansdale (1988) shows that users use "...two distinct psychological processes: recall-directed search, followed by recognition-based scanning" (p. 64). Therefore mechanisms which organizations can use to aid recall and recognition will add to user's ability to search for information.

All members of an organization benefit from this information as everybody who uses e-mail is an information user. Information and managerial decision making in strategy and planning requires that managers and senior managers effectively use e-mail in their formulation of judgments and day to day communications. Ducheneaut and Watts (2005) state that “...effective senior managers were found to use e-mail heavily and for precisely the kind of judgment intensive, equivocal communications tasks...” (p. 31). The system, if properly chosen and in strategic alignment with the organization will support the organization at all levels, from management across the spectrum for all e-mail users.

E-mail as a communications genre

Another method which e-mail has been researched deals with e-mail as a communications genre. E-mail is different from face to face communication and different from a phone conversation. Unlike a phone call or physical face to face meeting, e-mail lacks body language which a face to face meeting presents and tone and inflection delivered in a phone call (Rosen, 2000). On the other hand e-mail is a method which allows preplanned inflection to be delivered. According to Rosen, e-mail is open to a greater degree of misinterpretation depending on emotion at a given point during the conversation or the whimsical or seriousness of the moment. E-mail also provides the ability for tracking of conversations. This includes simultaneously communicating information to different levels of the organizational hierarchy. The addition of the other members within the organization can be overt with carbon copy or covert with blind carbon copy. Uses of these mechanisms are a reflection of the corporate culture.

The use of e-mail within an organization and the value assigned to e-mail is dependent on the organizational culture as created by managerial decisions. These managerial decisions concerning information handling through e-mail affect the efficiency of the communications genre. Communication has different levels of importance, where some communication is time sensitive and may need to be discussed over the phone or face to face. Research has shown that each type of communication has an appropriate vehicle with which to be delivered. The culture of an organization determines the factors used to determine the communication vehicle used (Ducheneaut & Watts, 2005). According to Ducheneaut and Watts “E-mail, because of its textual and asynchronous nature, is placed at the lower extreme of the richness scale and is said to be inappropriate for highly equivocal or ambiguous activities” (p. 30). Organizational culture persuades an individual to use one communications vehicle over another. The organizational culture is a reflection of managerial decisions with respect to aligning business strategy with Information Systems.

Training users and instilling e-mail culture

The culture of an organization is the reflective actions of the people which make up an organization. Each communication mechanism has traits associated with it that enable an organization to communicate as they feel necessary. E-mail enables attributes in communication for an organization which are “...supporting social and organizational processes” (Ducheneaut & Watts, 2005, p. 11). The leadership of an organization instills the social and organizational processes by policy and strategy. The leadership of an organization enforces the policy and strategy through control mechanisms.

The control mechanisms which managers use within these processes are defined as outcome controls, behavioral controls, social or clan controls, and personal control (Belanger & Collins, 1998). Klein, Beranek, Martz, and Jiang (2006) believe that output controls and learning are related, while behavioral controls restrict learning (p. 141). Task performing roles such as distributed computing using e-mail are, as Belanger and Collins state "...behavioral controls (task performer is rewarded for doing specified behaviors)..." (p. 145) and may not be conducive to an organization which values or promotes a learning environment. Therefore an organization which uses e-mail as a task oriented control mechanism may find this strategy incompatible in a pro-learning environment. A caveat is offered by Klein et al. who state that "...the relationships between management controls and organizational learning are not well understood..." (pp. 138-139). Although the research has shown that task performing roles restrict a learning environment (Klein et al.), the culture through behavioral roles determines rewards (Belanger & Collins), but the linkage between the two is a consideration for further research.

Organizational structure plays into communication patterns as Flores, Graves, Hartfield, and Winograd (1988) state that "The typical office presents a structure of recurrent patterns of conversation in mutually understood domains of possibilities associated with formally declared roles..." (p. 168). This is re-enforced by Ducheneaut and Watts (2005) as they discuss communication patterns as "...social acts that are regulated by organizational norms and thereby come to have meaning within their organizational context" (p. 31). These social acts are regulated through organizational leadership which defines the organizational culture.

Throughout this literature review information in an e-mail context is presented with the effects of managerial decision making and what impact they have on organizational culture. Klein et al. (2006) present one view of how management enables the organizations culture. Culture is developed from the observed effects of actions when people exert power. Klein et al. state “Managerial control refers to management’s attempts to influence IS project team members to behave in accordance with project goals” (p. 140). The observed view of managerial control is part of the organization’s culture, and culture is also reflected in how individuals within the organizations communicate through e-mail. Although research does not directly address the methods management uses to create an e-mail culture, or available methods to transform individuals e-mail use to be in alignment with the organization’s culture, some details exist about cultivating e-mail culture.

Cultivating culture in e-mail through the work environment

Organizational leadership has a myriad of methods to exert managerial control. Each method plays a part into the definition of the organizations culture. E-mail itself has been viewed as a control mechanism as users use e-mail to manage their tasks as reflected in research presented by Takkinen and Shahmehri (1998) stating that they “...consider e-mail as a task management tool” (p. 497). In their research Takkinen and Shahmehri use an explorative study to seek to understand the methods users at different levels in an organization use to organize their data. Takkinen and Shahmehri found that users exhibit three modes when accessing e-mail.

1. Cool mode, when the user accesses own folders.
2. Curious mode, when the user has much time on hand and wishes to organize.

3. Busy mode, which are times of high stress and ranking of messages and is associated with low number of folders but by a priority ranking system (Takkinen and Shahmehri, 1998, p. 498)

These modes, as defined by Takkinen and Shahmehri are part of the Categorization Assistant for E-mail (CAFÉ), and are user modes a user uses while accessing e-mail. These modes also determine the methods used while accessing e-mail system. The organizational culture determines the mode which the user works. This reinforces the belief that information and managerial decision making affect the organizational culture.

The culture of privacy in e-mail

This literature review presents a view from published research which shows that the decision's managers make can and must affect organizational culture. Decisions made by managers can have both a positive and negative cultural effect on organizations, and this fact should remain cognizant in the manager's decision process. This becomes extremely evident when personal information and perceived personal rights are at odds with an organizational culture.

E-mail systems contain vast stores of information, which might be personal, familial, or business related. Users of e-mail systems should understand that corporations can legally monitor e-mail, and though not all organizations do monitor e-mail, rarely do organizations give employees advance notice if they do monitor e-mail (Branscomb, 1994) (Rosen, 2000).

According to Levine, Everett-Church, and Stebben, (2002) monitoring e-mail in organizations is increasing. Reasons organizations monitor e-mail is that they are interested in intellectual

property theft, organizations may fear litigation, and organizations are concerned about productivity (Levine, Everett-Church, & Stebben, 2002, p. 254). While these concerns may have merit, e-mail as a communications genre is an important focus of an e-mail system, and abuse of monitoring e-mail may have a detrimental effect on an organizations culture.

The concept of privacy in e-mail is linked to the Fourth Amendment with many believing that e-mail is analogous to the legal protections associated with private letters (Rosen, 2000). This is legally unsupported as courts have consistently ruled in favor of organizations which individuals work for as they are on the company systems and time (Rosen). While monitoring e-mail is legal for organizations, the best policy concerning this is to frequently inform users about the ability to monitor, and use common sense and respect when the need arises to monitor e-mail. The choice associated with monitoring e-mail and informing employees about this monitoring is a function of the organizational culture.

Conclusion

Information and managerial decision making through effective use of e-mail is more than simply a method to communicate. E-mail as an Information System represents a method to store, find, and share information. E-mail aids the organization to align business strategy and enables system processes such as a distributed work environment through use of e-mail as a production line.

Managerial decision making changes the methods users use when accessing an e-mail system, which alters the flow of information through an organization ultimately modifying the culture of an organization. A specific method to transform the organizations culture, while

present in literature, does not present a map an organization can use to navigate the process.

This enabling information is an area of research which needs further attention. The choices leadership make concerning the processes surrounding e-mail affects the organization's culture. Managerial decision making and the effects on culture should be cognizant in the leaders mind especially with respect to the long term effects monitoring e-mail or the abuse of privacy in e-mail. Through this literature review organizations can use information and managerial decision making to manipulate an organization's culture enabling strategic alignment in an organization.

References

- Belanger, F., & Collins, R. W. (1998). Distributed Work Arrangements: A Research Framework. *Information Society, 14*(2), 137-152. doi:10.1080/019722498128935
- Branscomb, A. W. (1994). *Who Owns Information?: From Privacy to Public Access*. New York: Basic Books.
- Ducheneaut, N., & Watts, L. A. (2005). In Search of Coherence: A Review of E-Mail Research. *Human-Computer Interaction, 20*(1/2), 11-48. doi:10.1207/s15327051hci2001&2_2
- Fussell, S. R., Kraut, R. E., Lerch, F. J., Scherlis, W. L., McNally, M. M., & Cadiz, J. J. (1998). *Coordination, overload and team performance: effects of team communication strategies*. Paper presented at the Proceedings of the 1998 ACM conference on Computer supported cooperative work.
- Flores, F., Graves, M., Hartfield, B., & Winograd, T. (1988). Computer systems and the design of organizational interaction. *ACM Trans. Inf. Syst., 6*(2), 153-172.
doi:10.1145/45941.45943
- George, J. A. (2003). HIPAA regulations--a new era of medical-record privacy? *The New England Journal of Medicine, 348*(15), 1486.
- Hoffer, J. A., George, J. F., & Valacich, J. S. (2008). *Modern systems analysis and design* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

- Klein, G., Beranek, P., Martz, B., & Jiang, J. (2006). The Relationship of control and learning to project performance. *Cybernetics & Systems*, 37(2/3), 137-150.
doi:10.1080/01969720500425079
- Lansdale, M. W. (1988). The psychology of personal information management. *Applied Ergonomics*, 19(1), 55-66. Retrieved June 30, 2008 from
<http://www.simson.net/ref/1988/Lansdale88.pdf>
- Levine, J., Everett-Church, R., & Stebben, G. (2002). *Internet Privacy for Dummies*. New York, NY: Wiley Publishing Inc.
- Nie, N. H., Simpsen, A., Stepanikova, I., & Zheng, L. (2005). Ten years after the birth of the Internet, how do Americans use the Internet in their daily lives. *Stanford Institute for the Quantitative Study of Society*. Retrieved June 7, 2008 from
http://www.stanford.edu/group/siqss/research/time_study_files/ProjectReport2005.pdf
- Rosen, J. (2000). *The Unwanted Gaze: The Destruction of Privacy in America*. New York: Random House.
- Rumrill, P., Fitzgerald, S., & Ware, M. (2000). Guidelines for evaluating research articles. *Work*, 14(3), 257. Retrieved April 6, 2008, from Business Source Complete database.
- Schneider, G. (2004). *Electronic Commerce: The Second Wave* (5th ed.). Boston, MA.
- Swanson, E. B., & Ramiller, N. C. (1993). Information Systems Research Thematics: Submissions to a New Journal, 1987-1992. *Information Systems Research*, 4(4), 299-330. Retrieved January 14, 2008, from Business Source Complete database.

- Takkinen, J., & Shahmehri, N. (1998). Delegation of Tasks and Dissemination of Information in Organizations: Restructuring Internet E-Mail for Doing Things. *Proceedings of the AIS 98 American Information Society Americas Conference*. Retrieved May 30, 2008 from <http://www.ida.liu.se/~juhta/publications/ais98.pdf>
- Vessey, I., & Galletta, D. (1991). Cognitive Fit: An Empirical Study of Information Acquisition. *Information Systems Research*, 2(1), 63-84.
- Ward, J., & Peppard, J. (2002). *Strategic Planning for Information Systems* (3rd ed.). New York: John Wiley & Sons, Ltd.