

## **Playing Politics with E-Mail: A Longitudinal Conflict-Based Analysis**

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### **Abstract**

Few studies have attempted to link e-mail use to power and politics. The purpose of this paper is to integrate issues of power and conflict into the research on e-mail. To frame the discussion, the paper starts from a review of the relevant writings on power and e-mail. The literature review is concluded with the assertion that contextual, temporal, and conflict management aspects should be incorporated into research on power in organizations. Following this assertion, one of the leading models on conflict management is introduced and used to analyze a case study. The case is presented as a play in three “acts.” Each of the acts outlines a different set of conflict management strategies that were utilized by management and employees. The discussion synthesizes the analysis by demonstrating that a combined power and conflict management perspective can explain the playing of politics with e-mail.

## 1 INTRODUCTION

The last decade has seen an exponential growth in research on e-mail. At first, e-mail research focused primarily on the actual diffusion process (Pliskin 1989; Pliskin, Ball and Curley 1989; Pliskin and Romm 1990). More recently, aspects that relate to the effect of e-mail on organizations have been receiving considerable attention (Rice 1987, 1992, 1993; Rice and Aydin 1991; Markus 1994a, 1994b; Kling 1995). In recent attempts to explain e-mail diffusion and use, some researchers have recommended that concepts of power and control should be incorporated into e-mail research (Markus 1994b).

The purpose of this paper is, indeed, to integrate issues of power and conflict into the research on e-mail. More specifically, the research question that this paper addresses is how e-mail can support different organizational conflict strategies over time. To frame the discussion, the paper starts (in section 1) with a review of the relevant writings on power and e-mail. The literature review is concluded with the assertion that contextual, temporal, and conflict management aspects should be incorporated into research on power in organizations. Following this assertion, one of the leading models on conflict management is introduced. In section 2, the model is used to analyze a case study. The case is presented as a play in three "acts." Each of the acts outlines a different set of conflict management strategies that were utilized by management and employees. The discussion (in section 3) synthesizes the analysis by demonstrating that a combined power and conflict management perspective can explain the use of e-mail in organizational politicking.

## 2 THEORETICAL BACKGROUND

Some of the leading writers on power (Giddens 1985; Clegg 1995) indicate that one way to approach the literature in this area is to view it as reflecting a conflict between two "voices": the Marxist, or critical voice, and the functionalist, or managerialist voice. While the Marxist, or critical voice, tends to side with employees, considering the struggle against management as legitimate and even desirable (Mezaros 1970; Gramsci 1971; Gamble and Walton 1972; Geyer and Schweiter 1981; Mann 1986), the functionalist, or managerialist voice, tends to side with management, viewing employees' use of power as illegitimate, disruptive, and potentially destructive to organizations (Bennis et al. 1958; Mechanic 1962; Hickson et al. 1971; Mayes and Allen 1977; Gandz and Murray 1980; Mintzberg 1984).

Much of the literature on organizational politics tends to take the perspective of the functionalist, or managerialist, voice. In fact, one of the most common definitions of politics in the management literature is *the unsanctioned or illegitimate use of power to achieve unsanctioned or illegitimate ends* (Mayes and Allen 1977; Gandz and Murray 1980; Mintzberg 1984). This definition implies that politics is dysfunctional and aimed at thwarting initiatives that are intended to benefit the organization.

It should be noted that, taken together, the critical and the managerialist approaches have one thing in common: *they take sides*. Both have an implicit morality that sees *one group*, employees, in the case of the critical theorists, and management, in the case of the managerialist theorists, as right. As indicated by Clegg, this state of affairs calls for a new, integrative approach that could combine the two sides into one conceptual framework. The theoretical basis for such an approach can be found in Foucault's (1977, 1980) work, which suggests that truth (or knowledge) is relative and is a *product* of the power struggles that shape and define it.

The pioneering work on power and politics in information systems (IS) was undertaken more than a decade ago. Kling (1980) provided a starting point to this research by identifying six theoretical approaches that could explain resistance to the diffusion of information technologies: rational, structural, human relations, interactionist, *organizational politics*, and *class politics*. Building on Kling's work, Markus (1983) defined three major categories which can accommodate theories of resistance to diffusion: people-determined, system-determined, and interactionist. The main focus of her paper, however, was on one of the variants of the interactionist theory, i.e., the *political*. According to this variant, resistance is explained as a product of the "interaction of system design features with the intraorganizational distribution of power, defined either objectively, in terms of horizontal or vertical power dimensions, or subjectively, in terms of symbolism" (Markus 1983, p. 432). In other words, this theory predicts that information systems will be resisted by potential users if they cause a redistribution of power that either conflicts with the organizational structure (objective definition) or with the interests of individuals who are likely to lose power as a result of the implementation (subjective definition).

It is only in recent years that researchers have started to consider the social and political implications of e-mail. A review of the literature in this area reveals that much of it tends to focus on e-mail as a technology that *enhances work-related cooperation*. Thus, Finholt and Sproull (1990) investigated how e-mail can facilitate group decision making and bring about group unity and cohesion. Rice's series of studies (Rice 1987, 1992, 1993; Rice and Aydin 1991) were important in demonstrating the effect of networks on group behavior, with particular emphasis on how membership in networks affected members' attitudes to the new technology and promoted group innovation.

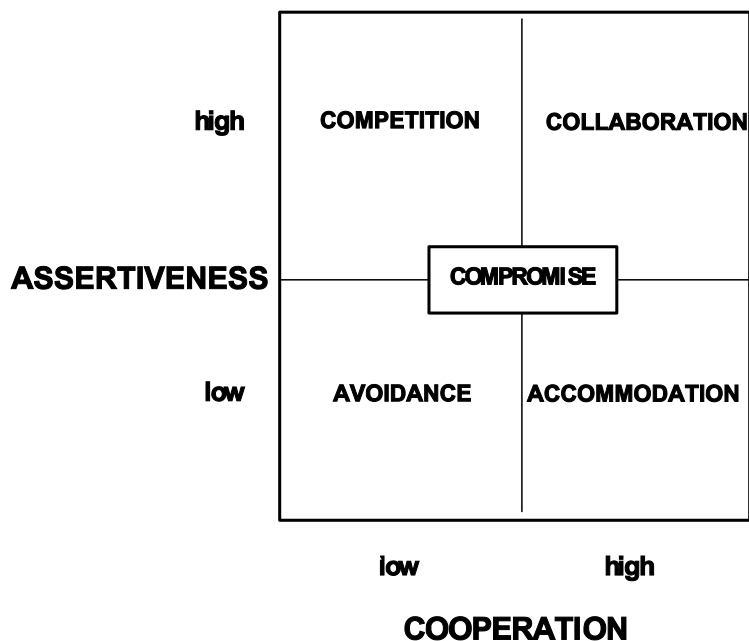
Another theme in the recent research on e-mail is the study of its role in supporting *social processes*. A major contribution in this area is Sproull and Kiesler's (1991) research. These authors were among the first to argue that e-mail has a democratizing effect on organizations. Other authors reported a series of dysfunctional attributes of e-mail, including flaming effects (Siegel et al. 1986; McGuire, Kiesler, and Siegel 1987), dis-inhibition, and de-individuation effects (Hiltz and Johnson 1989;

Matheson and Zanna 1989). Markus (1994a), in a recent study on the negative effects of e-mail on social life at work, added to the list of the negative social effects of e-mail strategies such as “manipulative forwarding,” “compulsive documentation,” and “aggressive accountability games.”

An emerging sub-theme within the research on the social uses of e-mail is the recent body of research on the role of e-mail as a *mobilizer of groups in conflict*. To date, much of the work in this area focused on public access systems (Lie 1990; Rogers, Collins-Jarvis, and Schmitz 1994; Van Tassel 1994). There is, however, some research on the social and political aspects of intraorganizational networks that has uncovered several uses and abuses of e-mail, including its potential use for managerial control (Winner 1992; Mantovani 1994), coalition building (Zuboff 1988, pp. 382-383), industrial relations (Pliskin and Romm 1996), and gender relations (Romm and Pliskin 1996a). The study that is presented here fits within this small but growing body of research.

As mentioned before, one of the major conclusions to be drawn from a review of the literature on power is that much of it *takes sides*. Summarizing the research on power, Clegg asserts that, to study this field in a meaningful way, one needs to (1) contextualize it in time and place, (2) adopt a systemic perception that examines more than one side, and (3) accept as a given that all sides in a power struggle are mutually dependent and equally capable of influence and manipulation. These three assumptions are the conceptual starting point for the analysis in this paper. Our analysis, which is based on an extensive case study, is highly contextualized. Also, by using a conflict management model as a basis for our analysis, we examine more than one side and avoid the danger of “taking sides.” Thus, we contribute toward an integrative approach to the study of organizational power.

The model that is the basis for our analysis here was first proposed by Thomas (1976). It is considered the leading model in the literature on organizational conflict management, with most of the empirical research in this area based or related to it (Ruble and Thomas 1976; Filley 1975, 1978; Robbins 1974; Thomas 1993). The model uses two dimensions: cooperativeness (the degree to which one party attempts to satisfy the other party’s concerns), and assertiveness (the degree to which one party attempts to satisfy his or her own concerns). Based on these dimensions, five conflict management strategies are identified: competition (assertive and uncooperative), collaboration (assertive and cooperative); avoidance (unassertive and uncooperative); accommodation (unassertive and cooperative); and compromise (mid-range on both assertiveness and cooperativeness). Figure 1 presents a pictorial description of the Thomas model.



**Figure 1** Conflict Management Model (based on Thomas 1993).

## 2 CASE STUDY

### 2.1 Methodology

The methodology of this study is based on the “integrative framework” developed by Lee in a series of papers on the use of qualitative research in management of information systems (Lee 1989a, 1989b, 1991, 1994). Lee’s integrative framework is formally presented in his 1994 paper (pp. 146-147). It combines three types of “understandings”: the subjective, the interpretive and the positivist. According to Lee, the three understandings are “far from being mutually exclusive and irreconcilable,” in fact, “they may be utilized as mutually supportive and reinforcing steps in organizational research” (1991, pp. 355-363).

True to the spirit of Lee’s model, the three types of understandings have been combined in our study in that (1) a case study that presents the points of view of a diversity of characters is the focal point of the paper (subjective understanding), (2) at the end of each “act,” the case events are discussed and analyzed in a way that reflects the authors’ interpretation of their meaning (interpretive understanding), and (3) the Thomas conflict management model is used to explain the behavior of the characters

and the major dynamics of the case events (positivist understanding). Another important source of insight for this study is the work by Lyytinen and Hirschheim (1988) and Hirschheim and Klein's (1989) on the application of critical theory to information systems development. In these papers, the authors introduced Habermas' (1974, 1984) notions of power and conflict into the analysis of information systems development via the conventions of stories, very much as we do in this paper.

Data for this study were collected by the authors at a university referred to here as UOR (the name of the university as well as the names of all characters in the case have been withheld to protect their anonymity; the names that are used are pseudonyms). Data was collected over three years (1993-1995), which overlapped with about half of the seven-year period during which the case events, including an e-mail implementation project, occurred (1988-1995). It should be noted that the authors, who reside in different continents and time zones, relied heavily on e-mail during the design of the study and the data analysis.

Textual analysis, questionnaires, and interviews were employed in the study. These were comprehensive and mutually supportive. For example, the interviews enabled cross checking of historical details extracted from the textual analysis of e-mail messages. To maximize reliability, both authors were involved in all data analysis activities. During data analysis, data from all sources pertinent to a particular event were analyzed and the interpretations of all interviewees for that event compared. Decisions regarding the events that were to be included in the case history were reached on the basis of a careful analysis of the data from the various sources and identification of major themes that were reflected in them. Only when an event was supported by data from all sources and when the two researchers were able to reach consensus on its validity was it included in the case history.

An important final stage of the analysis was the identification of the three major phases in the evolution of the conflict (presented here as "acts") and the main conflict management strategies utilized in each phase. The major criterion (Giddens 1985) used to decide when an "act" started was whether one or more of the two major groups of actors (management versus the rebels) *switched from one conflict management strategy to another*. The major means for validating decisions regarding the duration of the "acts" as well as the specific conflict management strategies used in the acts was a consultation process with a group of "judges." The judges (ten students taking a graduate research methods course in one of the two authors' universities) were provided with the case study as it is presented in this paper and were asked to assess it in terms of the conflict management model. The categorization of the various conflict management strategies, as well as the decision as to where the three acts started and ended are based on their consensus opinion.

**Textual analysis:** A variety of documents were collected at various stages of the e-mail implementation project. These included e-mail promotional materials, training transparencies, and minutes of relevant meetings. Textual analysis also included in-depth study of the organizational chart, hard and soft copy correspondence, newspaper clippings, and progress reports. A major source of data for the textual

analysis was e-mail messages. Over 150 e-mail messages were made available to the authors by the key players in the case. The e-mail messages were analyzed using a specially constructed content analysis scheme. The scheme had both quantitative and qualitative aspects. The quantitative aspect included a recording of the number of e-mail messages broadcast by members of the two major groups (management and the rebels) as the case progressed. The qualitative aspect involved a thematic categorization of the issues discussed on e-mail by members of the two groups, with special emphasis on issues relating to the conflict.

**Questionnaires:** During the e-mail implementation, a survey assessing employee satisfaction was conducted by the “rebels” (see following sections for more details). The results from the survey were made available to the authors by the interviewees. These results provided valuable information that complemented and helped in cross-validating the qualitative data derived from the interviews.

**Interviews:** In-depth interviews with forty members of UOR were the most important source of data for this study.

During data collection, a semi-structured interview schedule, consisting of a series of open ended topics, was utilized. The questions gauged interviewees’ memory of the case events, as well as their interpretation of the meaning of the events. Even though the interview schedule was semi-structured, an attempt was made to cover the same topics in all interviews. Issues on which interviewees disagreed received special attention. When such issues were identified, they were included in subsequent interviews, with a special attempt made to reach consensus among the interviewees in the two major groups (management versus the rebels) over these issues. In addition to gathering personal details (such as background information, career data, and future plans), interviewees were asked to describe the quality of their work life while the case events took place, relationships with other members of the organization, and areas of responsibility. The interviews, which lasted on average about ninety minutes, were all taped and transcribed for later analysis by the authors.

A similar data analysis scheme to the one used for the e-mail data was also used for the interview data. The scheme included a categorization of major themes in the interviews, with particular emphasis on issues relating to the conflict between management and the rebels.

Interviews were conducted over a period of three years (1993 to 1995). On average, two interviews were held with each interviewee over the three-year duration of the data collection process, bringing the number of interviews to over eighty. Members of three major groups were interviewed:

#### *Main Parties to the Conflict*

**Top Management** — Out of the eighteen interviewees that were members of the administrative staff, two were with the Provost and the Personal Assistant to the President can be seen as reflecting the views of top management.

**The Rebels** — Out of the twenty-two interviewees that were members of the academic staff, five were individuals who were closely associated with the “rebel” group (see following sections for description of these individuals). All five members of this group were Associate Professors. The “rebels” came from four different Faculties within the university.

*Interested Observers*

**Mid-Management** — Out of the eighteen interviewees that were members of the administrative staff, two can be categorized as representing mid-management. These interviewees included the Head of the Information Technology Unit (ITU) and the Head of User Services.

**Non-Activist Academics** — Out of the twenty-two interviewees that were members of the academic staff, fifteen were academics who were not directly involved in the conflict but who still had a strong interest in it. These individuals included two Associate Professors, ten Full Professors (including three Department Chairs and one Dean) and three Assistant Professors. This sample was derived from six different departments from all major divisions at UOR.

*Indifferent Bystanders*

**Low Level Administrative Staff** — Of the eighteen interviewees that were members of the administrative staff, who can be categorized as low level, seven were secretaries and seven were members of the Information Technology Unit (ITU). Each of the secretaries was from a different department, representing all major divisions at UOR. The seven ITU interviewees included the past and present coordinators of the e-mail project and five additional employees of the Unit.

**Students** — Out of the twenty-two interviewees that were members of the academic staff, two were Ph.D. students employed as research assistants.

As can be gathered from this presentation, data was collected from a variety of groups, representing six different perspectives. It should be noted, however, that even though data from all these groups was collected and analyzed, in this paper only the perspectives of top management and the rebels are highlighted. The other perspectives, which were useful for getting a complete picture for this study, offer material that can be further developed for future research and additional papers.

*Case Events — Act 1*

**The E-mail Rebellion.** UOR is a medium-sized university, with about 600 faculty members and about 8,000 students. It is centrally located within a densely populated, metropolitan area. Professor Stark, its president for more than a decade, had developed a reputation for being one of the most innovative academic leaders in the country, using the university as a laboratory for experimental new projects.



To support his innovative projects, Professor Stark introduced major changes in UOR's staffing. Within the first five years of his reign, he recruited a large number of new staff. Since the majority of the new recruits were highly qualified in their respective fields, they were often recruited at levels higher than Assistant Professor. This resulted in a large increase in the number of Associate Professors at UOR. To maintain a strong grip on the university, the President had insisted right from the start on full control over promotion and tenure procedures. As a rule, he or his right-hand man, the Provost Professor Selvi, chaired the promotion committees of all Associate Professors in the university. The President also maintained tight control over the promotion to Full Professor, making sure that the number of Full Professors within each department did not go beyond two Full Professors.

Toward the middle of 1988, it became apparent that the tight quota on the number of Full Professors was becoming a problem. Many of the "new" Associate Professors realized by then that their expectations of promotion to Full Professor within the foreseeable future were not going to be met. The position of Full Professor was filled in many departments by men and women who had no intention of retiring or moving to another university. Many of the "older" Professors had formal qualifications that were much below those of the "new" Associate Professors. Yet due to the President's quota system, it was clear that, until they retired, promotion of the "new" Associate Professors was impossible.

In this climate of innovation, on one hand, and growing resentment of the consequences of these innovations on the other, an e-mail implementation project was initiated late in 1988. The e-mail software was first piloted in the ITU for a few months. In the following year (1989), 100 administrators joined the e-mail experiment. Soon thereafter, a communication networking project was initiated to physically link all offices and other facilities in existing buildings to the central computer communication network. To facilitate the universal diffusion, a project manager was hired to head the e-mail implementation. She gradually approached individual departments, conducting training workshops for them. By the end of 1992, the project was declared a success, with all 1,200 potential users in UOR joining the network.

In early 1991, shortly after a critical mass of 800 users was achieved, a series of political events began to unfold. The trigger was an announcement by the Provost, on a routine departmental visit, that UOR's long-term objective was to "gradually abolish internal research grants." John Smith, an Associate Professor in the Faculty of Engineering, reacted by e-mailing, to all active network users on UOR, a memorandum that was critical of the financial conduct of the university. In response, the President electronically distributed a letter announcing a plan to create a forum of academics that would participate in strategic planning. Shortly thereafter, department chairs were notified (on internal university mail) of the date for the first meeting of the forum and the proposed agenda for the meeting.

Another Associate Professor of the Engineering Faculty, Sam Dover, accidentally came across the planning documents for the first forum. Following this, he e-mailed a series of provocative questions to the President, with copies to the campus-wide

electronic distribution list. Dick Stone, an Associate Professor at the Faculty of Humanities and Social Sciences, responded to the messages of Professors Smith and Dover via e-mail, again with copies to the university-wide mailing list. He agreed that university resources were not allocated rationally.

During the weekend that followed, a letter written by a top official at UOR appeared in the local daily press. The letter accused Professors Smith, Dover, and Stone (hereinafter, the rebel group) with disloyalty to UOR. Professor Stone wrote a protesting response to the newspaper, sending e-mail copies to the university community. In his message, Professor Stone insisted that he had the right to express his opinion on a matter that was of utmost importance to the university community.

Early in 1992, the President fulfilled his promise to convene the planning forum. Since there was a rumor that one the rebels was going to use this forum to request the resignation of the President, the meeting was attended by most of UOR community, as well as by representatives of the local and national press. However, despite the expectations of an outburst of accusations, the agenda was followed to the letter, the debates were civilized, and the meeting dispersed without a vote of no-confidence against the President.

In the following months, even though there was no mention of the rebellion on e-mail, much was happening behind the scenes. The rebels had established an informal e-mail list that linked them with a group of Associate and Full Professors around the university. Two silent supporters of the rebels were the chairpersons of their departments. Although the rebels' supporters were not ready to express their views on e-mail, the growing network of supporters was significant enough to convince the rebels that the time had come to launch the second stage of their campaign. Believing that there was wide-spread discontent with the President's policies, they decided to conduct a survey that would document faculty dissatisfaction.

Toward the end of 1992, the survey was distributed on e-mail to all UOR faculty, with the request that responses be made by e-mail. The questionnaire covered a wide range of issues, including administrative procedures, promotion, and incentives. Once the results were analyzed, it became apparent that dissatisfaction among respondents was overwhelming. The results were distributed to all members of the community via e-mail. Attached to the results were comments by the rebels which made it clear that they saw the results as supporting their claims.

Almost immediately after the survey results were distributed, the President announced that a comprehensive review process encompassing all departments on campus was to commence immediately. The first targets of the review were the departments of the three rebels. The review process was swift. Within weeks it became known that the report of the review committee was very critical of teaching, research, and administrative practices in the two departments. Following the publication of the report, the chairpersons of both departments announced their resignation. While one of the chairpersons was later reinstated, the other left the university, accepting a position in another part of the country.

Going back to the conflict management model that was presented in the previous sections, what conflict strategies can we identify in the first act? From the case data, it appears that the two sides, the rebels and management, were using two different strategies.

**The Rebels** — The rebels were clearly the initiators of the conflict in this act, applying what the model refers to as a “competitive” strategy, i.e., one that is low on cooperativeness and high on assertiveness. In a review of the literature on conflict management, Robbins et al. (1995) refer to this strategy as a win-lose approach. It is the most risky strategy in the conflict management repertoire because of its potential damage to long-term relationships between the parties to the conflict. It is, therefore, worth employing only when the stakes are high, the actor believes in his or her ability to Will, and the long-term effect on relationships is not considered important. In the first act of the case study these considerations may have been the underlying cause for the rebels’ behavior. The rebels saw their situation as hopeless. At the same time, they believed that e-mail might be able to change the balance of power to their advantage. They saw the rebellion as a calculated risk that, with the help of e-mail, they just might win.

**Management** — Management was in a defensive position in the first act, applying what the model refers to as an “avoidance” strategy, i.e., one that is low on cooperativeness and low on assertiveness. In a review of the literature on conflict management, Robbins et al. determine this strategy to be preferable in cases where the actor feels helpless to assert himself or herself, or when the issue is not important enough to take a stand on. In the long run, this strategy causes considerable frustration because issues do not get resolved. Studying management behavior in the first act from this perspective, it appears that management chose not to openly counter-attack because it believed that the rebels enjoyed wide-spread community support. Given this is perception, an open conflict with the rebels was seen to be too risky. During the first act, management had not yet learned to use e-mail for its own political purposes, while the rebels found it useful for their political campaign.

Figure 2 presents a pictorial depiction of the conflict in Act 1. The figure not only indicates which conflict strategies were employed by the two sides, but also that a gap (represented by the arrow) existed between them. This gap relates to the disequilibrium of the system by the end of the first act, which led to further escalation of the conflict in the next acts.

#### *Case Events — Act 2*

**Management Retaliates.** Following the resignation of the two department chairpersons, the rebels became silent. Realizing that their supporters were not going to openly side with them against the President, they chose to refrain from using e-mail for any further expressions of dissent. However, even though the rebel group was no longer active, on-campus political activities on e-mail continued. Many members of the UOR community, including students, approached the campus e-mail list to exchange views and air concerns about controversial issues, including gender relations, racism, and student rights.

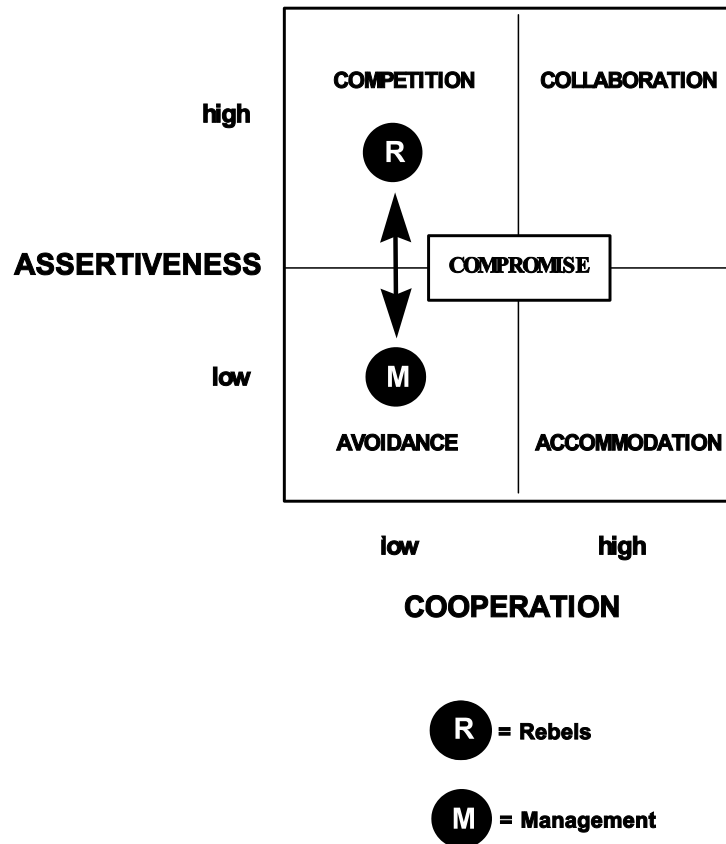


Figure 2 Act 1.

One particular message, distributed in late 1993, led top administration to change e-mail policies in a significant way. The message, which concerned the imminent introduction of a sexual harassment policy at the university, was highly sexist. It was sent anonymously from one of the Science Faculty labs by what appeared to be a student. Even though the letter was an isolated case, the university authorities used it as an excuse to introduce a new e-mail policy, which drastically curtailed student access to e-mail. It mandated that only students serving as research or teaching assistants for individual faculty members could be granted e-mail accounts and that those accounts would be valid for one semester only. Another change to e-mail policy involved restrictions on employees' use of the campus-wide distribution list. To restrict the use of the list, employees were informed on e-mail that the campus-

wide list was intended only for dissemination of technical information such as dates of seminars and special events. Any controversial issues were to be sent to the university's newly created "Discussion List."

By the end of 1993, an e-mail code of practice was introduced. The code was compiled with the help of legal consultants. It stipulated a series of penalties for "misuse" of e-mail, ranging from fines to disconnection from the system. In extreme cases of misuse for "vilification of individuals, groups, or the university as a whole," the code stipulated legal action against the culprits. Failure to send an item to the "right" distribution list was also defined as a breach of the code that could result in the individual being disconnected from e-mail. A draft of the proposed code was distributed to all members of the university and, despite opposition to some of its sections by the rebel group and others, it became part of the university's body of rules and regulations.

Shortly after the introduction of the e-mail code of practice, the President decided to convene a meeting of all Associate Professors at UOR. The meeting, which was held in February 1994, was intended to address the Associate Professors' concerns and alleviate their fears that they had no future at UOR. At the meeting, three of the most vocal Associate Professors in the room were the rebels, Professor Smith, Professor Dover, and Professor Stone. Following the meeting the three rebels, who felt it had accomplished nothing, decided to renew their political activities.

On March 1994, the President sent an e-mail message to all members of UOR, announcing his resignation. The Provost, Professor Selvi, became Acting President. He remained in this capacity for the next few weeks, until the selection committee, which had been appointed by the university Board of Governors, had completed its deliberations, electing him as the new President.

In March 1994, the President sent an e-mail message to all members of UOR announcing his resignation. The Provost, Professor Selvi, became Acting President. He remained in this capacity for the next few weeks until the selection committee, which had been appointed by the university Board of Governors, had completed its deliberations, electing him as the new President.

Even though Professor Selvi was well-known around UOR, having served under Professor Stark for over five years, his leadership was not as widely accepted as his predecessor's. Within a short time after his appointment became known, several groups on campus tried to challenge his leadership. The most notable attempt was by UOR's academic union, who for years had been trying unsuccessfully to obtain concessions for their members from Professor Stark. Considering that the appointment of the new President was an opportunity to establish a "new order," the union declared that they wished to start negotiations on a new contract.

The negotiations on the new contract had reached a deadlock by the end of May 1994. The union responded to this by declaring, again on university-wide e-mail, that unless a breakthrough was achieved within the next few weeks, all academics at UOR would begin a general strike on the first day of the next school year, namely, in September 1994.

At the beginning of August 1994, Professor Smith sent an e-mail message to all members of the UOR community. The message was entitled "Promotion of the Unpromotables." It contained a plea to the university authorities, in particular, the newly appointed President, to address the problem of Associate Professors at UOR. In his message, Professor Smith claimed that the group of Associate Professors, who by now numbered eighty professors, included some of the most highly qualified individuals in the university and yet, because of the previous President's quota system, many of them had no career prospects. He demanded that the quota of two Full Professors per department be lifted to allow the promotion of more Associate Professors to Full Professor.

The only response to Professor Smith's e-mail message came from Mr. James Grace, the head of ITU. In an e-mail message, which was sent to Professor Smith two days after his "Promoting the Unpromotables" message, Mr. Grace reminded Professor Smith of the university e-mail code of practice. According to the code, messages that were intended to start a public debate were to be sent to the "Discussion List" and not to the campus-wide list. Mr. Grace concluded his message by maintaining that sending the message to the university-wide list was a breach of the code, punishable by disconnection from e-mail.

Even though Mr. Grace's message was not intended for wide distribution, Professor Smith decided to send it immediately to the campus-wide distribution list. Within minutes, the entire campus community was aware that one of its Associate Professors was under threat of having his e-mail disconnected. Professor Smith attached to Mr. Grace's original message a long message of his own in which he reiterated his previous points. He concluded his message by indicating that the university's threat to disconnect him from e-mail should be responded to by all members of the community, since it represented a most serious attack on academic freedom.

Within hours after Professor Smith's message appeared on e-mail, there was a response from Mr. Grace. This time, Mr. Grace sent his e-mail message to the campus-wide list. In his message, he expressed indignation at the fact that his "private" message to Professor Smith was forwarded to all UOR members. He insisted that the university was serious in its intention to impose the newly introduced e-mail code of practice and that no one, including Professor Smith, could get away with deliberately breaching the code. To make sure that all users were aware of the content of the e-mail code, a copy of the code was attached to Mr. Grace's message.

Shortly after Mr. Grace's message appeared on e-mail, there was a response from Professor Smith. Despite Mr. Grace's second warning, the message was again sent to the campus-wide list. In his response, Professor Smith reiterated the points that he had made in the first message. He concluded his message by stating that Mr. Grace's use of the e-mail code as a means for silencing him was not going to work and called upon all members of the UOR community to challenge the code by supporting the rebels' demands.

The next morning, when UOR academics turned on their e-mail expecting to get another message from Professor Smith, there was none. Instead, there was a message from Professor Dover, who informed the UOR community that, during the previous night, the university authorities had carried out their threat and disconnected Professor Smith from e-mail. Professor Dover concluded his message by urging members of the community who wanted to support the struggle of the Associate Professors to express their views on the university e-mailing list.

This, however, did not happen. In the next few days the only messages that appeared on e-mail were from university officials, particularly members of the university's Information Technology Unit. The messages supported Mr. Grace by maintaining that it was his duty to implement the e-mail code of practice, even if it meant disconnecting an academic from the system. All other members of UOR, despite their strong reactions to Professor Smith's disconnection, were reluctant to take a stand on the matter on e-mail.

Going back to the conflict management model that was presented in the previous sections, what conflict strategies can we identify in the second act? From the case data it appears that the two sides, rebels and management, were again using two different strategies.

**Management** — Management was clearly in an attacking position, applying what the model refers to as a “competitive” strategy. By the beginning of Act 2, management realized that the three rebels did not enjoy the wide community support that management had at first assumed they had. Management also realized that e-mail could be used not only for coalition building, as was demonstrated by the rebels in the first act, but also for top-down managerial control. The introduction and eventual enforcement of the e-mail code of practice was used to directly attack and punish the rebels, a strategy that management was not willing to risk in the first act. During the second act, this strategy was no longer seen as risky. In fact, it was probably perceived as advantageous, since it not only had the potential to punish the rebels, but also to deter others from following in their footsteps. Note that according to this deconstructive analysis (Boje and Dennehy 1994), management is assumed to have been willing to bear the long-term consequences of using a “competitive” strategy because, by the end of the second act, it was under the impression that the rebellion was totally suppressed.

**The Rebels** — The rebels seemed to have been in a defensive position in the second act, applying what the model refers to as an “accommodating” strategy, i.e., one that is high on cooperativeness and low on assertiveness. In a review of the literature on conflict management, Robbins et al. describe this strategy as one that is used when one party seeks to appease another. The motivation for such a strategy is often fear of retaliation by the other side. This has long-term negative consequences, since it may lead to bitterness and hostility on the part of the “self-sacrificing” party. The accommodation strategy of the rebels was reflected in the second act by their passive acceptance of the e-mail code of practice. Even though they were aware of its potential implications for their struggle and expressed strong views about the code on e-mail, they eventually chose not to oppose it in any significant way. From our

interviews with the rebels, it appeared that the resignation of their department chairs was a major factor in their decision to accept the code. These resignations were an indirect signal that, if they persisted with their campaign, their positions could be threatened as well.

Figure 3 presents a pictorial depiction of the conflict in Act 2. The figure not only indicates which conflict strategies were employed by the two sides, but also that a gap (represented by the arrow) existed between them. This gap relates to the disequilibrium of the system by the end of the second act, which led to further escalation of the conflict in the third act.

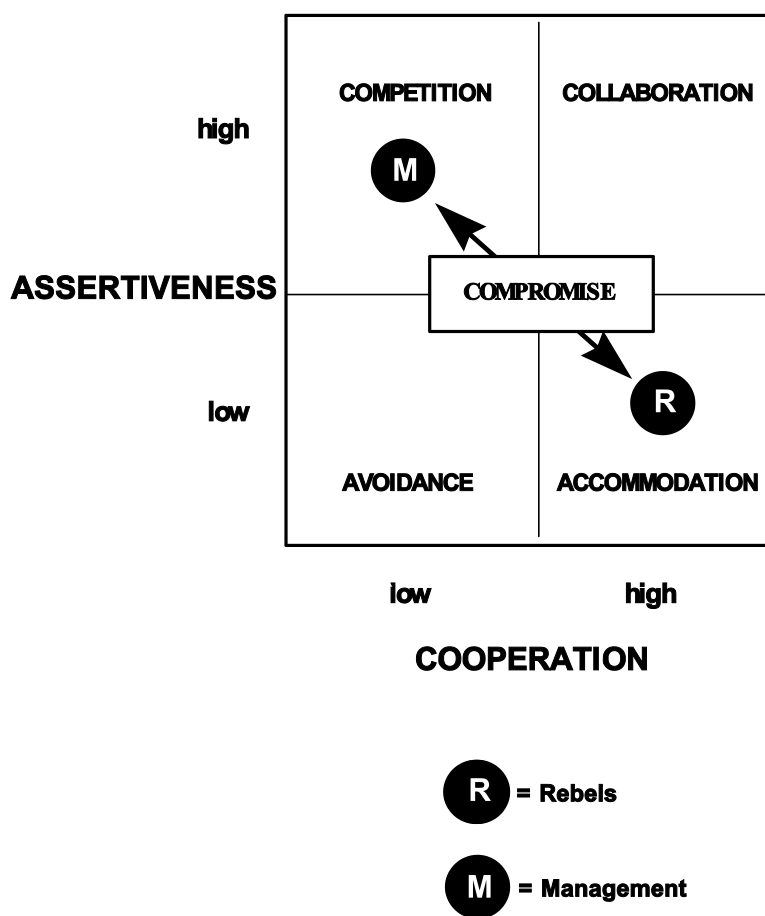


Figure 3 Act 2.



*Case Events — Act 3*

*Finding a Common Ground.* Within a week after its disconnection, Professor Smith's e-mail was reconnected. An announcement to this effect was sent by Mr. Grace on e-mail to all members of the UOR community. The message indicated that "the disconnection was temporary and intended as a warning to all members of the community who are intent on breaching the e-mail code of practice."

For the next few months, there were no further messages on e-mail from Professor Smith or the other two rebels. However, the three were very active behind the scenes. During September 1994, the rebels renewed their links with other Associate Professors who were involved in the activities of the first act. These included Professor Julia Robbins from the Faculty of Humanities and Social Sciences and Professor John Moor from the Faculty of Law.

During September 1994, the members of the group communicated extensively on e-mail, slowly consolidating their positions and formulating their ideas on future strategy. One of the first decisions the group made was not to let the promotion of Associate Professors be forgotten. Following this principle, Professor Robbins sent a supporting message to the University Discussion List. In her message, she listed the demands of Professors Smith and Dover and insisted that they should be seen as legitimate. A week later, a similar message from Professor Stone was sent to the University Discussion List. For the next few weeks, the group continued the practice of sending one e-mail message per week to the University Discussion List. Each message started by listing the names of all previous contributors, reminding the university community that the rebel group was slowly expanding. Each message was concluded with a call to the university authorities to take action on the Associate Professors' plight.

Another initiative that was much debated and then implemented by the group was to take their concerns directly to the President. Professor Smith was elected to represent the group. He met with Professor Selvi, but found that the President was reluctant to reconsider the policies of his predecessor. The meeting ended with Professor Selvi telling Professor Smith that if he felt frustrated at UOR, he should look for employment elsewhere.

Professor Smith informed his fellow activists of the meeting with the President, indicating that in view of the events that had transpired at the meeting, he felt that he should not lead the group. After some debate it was resolved that Professor Stone would be the formal spokesperson for the group.

As the new formal leader of the group, Professor Stone approached Mr. Grace with a request to help him establish an Associate Professors e-mail list. Mr. Grace was happy to oblige. Within a week, the first message appeared on the newly established Associate Professors list. It was sent by Professor Stone to all Associate Professors at UOR, calling on them to express their views on the proposed changes to the Full Professors quota. Contrary to the rebels' expectations, not much came out of this initiative. Very few of the eighty Associate Professors responded to the call. However, even though the majority of the Associate Professors were reluctant to be

openly identified with the list, there were quite a few who expressed support by sending e-mail messages directly to the rebels.

One of the more prominent silent supporters of the group was Professor Graham Chandler, the Dean of the Faculty of the Humanities and Social Sciences. As a seasoned politician, he advised the group that the best way to proceed was to get the support of their faculties. Following Dean Chandler's advice, the rebel group decided to take their demands to the faculties. By the end of September 1994, Professor Smith was successful in passing a motion at a meeting of the Faculty of Engineering that supported the Associate Professors' demands. Two weeks later, Professor Robbins was successful in getting the Faculty of Humanities and Social Sciences to vote favorably on a similar motion. Both faculty resolutions called upon the university to lift its quota on promotions to Full Professor.

During September 1994, another set of events was taking place at UOR. As promised, on the first day of school, the union announced on the university-wide e-mail list that, in view of management's unwillingness to accept any of the union's demands, the union felt compelled to carry out its threat of a general academic strike. A one-day strike was called for the following Monday. Academics were urged not to attend lectures or carry on any other teaching-related activities during the one-day strike.

Contrary to the union's expectations, the strike was not a success. Many Professors actually crossed the picket lines on their way to lectures, insisting that the second week of the semester was too important to miss. Following the strike, the President announced on the university wide e-mail that in view of the union's unjustified strike, he was discontinuing negotiations with them. He called upon the university community to put pressure on the union to tone down their demands so that the negotiation process could be renewed and brought to a successful conclusion. Within a week, the university community was informed by the union, on university wide e-mail, that negotiations with management had been resumed.

While the dispute between the union and the President was going on, the group of rebels established its own contacts with the union. The head of the union suggested to the rebels that their demands could be added to the list of proposals that he and the other union representatives were negotiating with the President.

In early November 1994, Professor Chandler was successful in passing a resolution in Senate which supported the demands of the rebels. However, in view of the fact that several Full Professors strongly opposed the resolution, the President decided to appoint a special Quota Committee to study its actual implementation. The members of the Quota Committee were promptly elected, with six of the eight members on the committee being Full Professors. The Senate Committee was expected to complete its work in two weeks and to present its report to Senate on its last meeting before the Christmas break. By mid-December 1994, the Senate Committee had completed its work. In its report the committee recommended that the quota on the number of Full Professors be maintained, but extended to three Full Professors per department.

During 1995, all five members of the rebel group applied for promotion to Full Professor. While the applications of Professors Smith and Stone were denied, Professors Dover, Robbins, and Moor were promoted to Full Professor.

Going back to the conflict management model that was presented in the previous sections, what conflict strategies can we identify in the third act? From the case data it appears that, as the events of the third act unfolded, both sides moved toward one strategy collaboration.

**The Rebels** — In this act, the rebels were, again, the initiators of the conflict, but this time they applied, almost from the start, what the model refers to as a “collaboration” strategy, i.e., one that is high on both cooperativeness and assertiveness. In a review of the literature on conflict management, Robbins et al. refer to this strategy as a win-win approach. They see this strategy as almost as risky as competition, because it requires both sides to open up, disclose their true preferences, and admit their “bottom line.” It is, however, potentially the most rewarding strategy because it can lead to solutions that are advantageous to both sides. It also promotes a long-term relationship between the two parties. Realizing that simply attacking management on e-mail (as they did in the first and second acts) was not going to work, in this act the rebels tried to mobilize support for their claims in other ways, namely, through joining forces with the union and by taking their campaign to the Faculties and the Senate. Most importantly, in contrast to presenting management with an ultimatum, this time they tried to identify a solution that would be acceptable to management: changing the Full Professors quota rather than getting rid of it.

**Management** — Management started this act with a competitive strategy, which was reflected in the President’s refusal to negotiate with the rebels, and yet, toward the end of the act, management reverted to a collaboration strategy. This was reflected in the President’s willingness to appoint a Senate committee that would draft the proposal for changing the quota of Full Professors and eventually in his willingness to implement the new policy. Note that, like the rebels, management also became aware, by the end of the third act, that e-mail was limited as a means of managerial top-down control. Faced with wide-spread disapproval of Professor Smith’s disconnection from e-mail, management was compelled to reconnect him to the system. From this point on, management realized that using the e-mail code to suppress free expression was not going to succeed. A different approach, which involved listening to the rebels’ demands and responding to them with an appropriate policy, was necessary.

Figure 4 presents a pictorial depiction of the conflict in Act 3. The figure indicates that, in this act, for the first time, the two sides were using the **same** strategy, thus closing the gap that existed between them in the previous two acts. The closing of the gap represented a change from the state of disequilibrium, which existed in the first two acts, to a state of equilibrium.

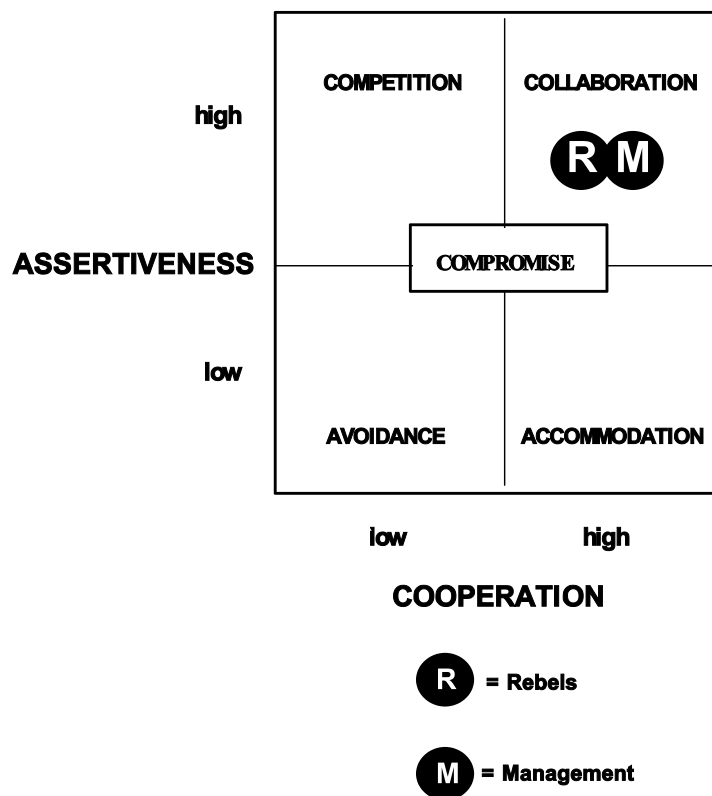


Figure 4 Act 3.

### 3 DISCUSSION AND CONCLUSIONS

The starting point for this paper was the literature on power and its implications for e-mail research. One of the major objectives of this study was to examine the use of e-mail for power and politics, with an emphasis on contextual, temporal and conflict aspects. As the previous sections have demonstrated, a contextualized, conflict-based, temporal approach is necessary if we are to understand the complexity of e-mail use in organizations. How can we synthesize the data in the three acts of the case study? Taken together, the acts seem to lead to several conclusions.

The first conclusion is that the evidence from the case demonstrates that e-mail can be considered a technology with strong political potential. As indicated by Romm and Pliskin (1996b), the usefulness of e-mail for political activity derives from its accessibility, speed, multiple addressability, recordability, processability, and routing.

By virtue of its amenability to political use, e-mail can increase tensions between conflicting factions in an organization. Conflicts that may have existed before e-mail was introduced can be extenuated, polarized, and brought to a point of no return. In extreme cases, the coalition-building potential of e-mail can lead to fragmentation of an organization into several continually fighting coalitions. On the other hand, the potential of e-mail to be used for top-down control can lead to extreme suppression of employees and abuse of managerial power.

It should be noted that the data that has been presented here cannot conclusively *prove* that e-mail caused the events in the case. E-mail supported the conflict management strategies that were employed by management and employees, but did not cause the conflict itself. In fact, it can be argued that many of the events occurring in the case could easily have happened before e-mail was introduced and abused. What the evidence in this case suggests is that the introduction of e-mail may have been a moderating variable that made the events more likely to occur.

The fact that the effect of e-mail cannot be “proven” as the one factor explaining the events in the case is supported by recent theoretical assertions by Soh and Markus (1995) and by Robey (1995). As indicated by Soh and Markus, it is often impossible to demonstrate cause and effect relationships in IS research. Theories of process which focus on necessary conditions that bring about a given result are therefore preferable to theories of variance which focus on sufficient conditions that may or may not bring about a given result. A similar point is raised by Robey (1995, p. 61), who indicates that “Efforts to encompass contradiction in theory reveal the difficulty and futility of making simple predictions about the organizational consequences of information technology.” Following this assertion, Robey advocates the adoption of less simplistic theories that put less emphasis on significant empirical associations between variables and more emphasis on plausible explanations of observed phenomena.

A second conclusion to be drawn from the case relates to the limits of the use of e-mail. As indicated in the case, the regulation of e-mail can expose the vulnerability to social scrutiny not only of employees, but also of management. By introducing the e-mail code of practice, management opened itself to further criticism by employees. The e-mail code of practice proved to be difficult, if not impossible, to enforce. In the long run, its introduction did **not** stop the social and political unrest at UOR, nor did it help the President gain popularity; rather it increased opposition. While the e-mail code of practice may have been useful in discouraging the rebels and their supporters from expressing their views on e-mail, it did not stop them from using other avenues for venting their frustrations in the long term.

The third conclusion to be drawn from our case is that e-mail can be put to different political uses. As we have pointed out in the analysis of the three acts, the use of e-mail by the two sides involved in the conflict was different in each of the three acts. In the first act, the rebels used “competition” while management was using “avoidance.” In the second act, management used “competition” while the rebels were using “accommodation.” It was only in the third act that both sides applied “collaboration” as their conflict management strategy.

How can the changes in the use of e-mail for conflict management be explained? As we have indicated in the analysis of the three acts, we believe that the changes in the use of e-mail for conflict management may reflect a learning process on the part of both the rebels and management. At the beginning of the case, the rebels were the first to learn that e-mail was an effective tool for coalition building. They chose to use the new technology because it had technical features that they saw as highly amenable to a large-scale campaign against the President. At this stage, management was not yet aware that e-mail could also be used to advance its own political objectives. In the second act, management learned that the new technology could be exploited for its own political purposes, i.e., for top-down control. Throughout the second act, it used the e-mail code of practice to regulate, curtail, and, eventually, deny the rebels access to e-mail. It was only in the third act that both sides had learned that using e-mail to intimidate, coerce, or overpower the other side was bound to fail. It was at this stage, therefore, that they considered using it to support a collaborative conflict management strategy.

Thus, the most important lesson to be learned from this case study is that, in the long-term, the different conflict management strategies to which e-mail lends itself may crystallize into a collaborative strategy. Even though this is only one case and cannot be extrapolated to all other possible e-mail supported scenarios, we believe that the explanation for the evolution of the conflict outlined may have general implications that go beyond this case. As we have indicated in the analysis of the three acts, when one side uses a competitive strategy, particularly when a new technology is used to support this strategy, the other side is likely to respond with a strategy that is low on assertiveness, namely, either "avoidance" (used in Act 1 by management) or "accommodation" (used in Act 2 by the rebels). Assuming that the two sides take turns in playing assertive and non-assertive roles in a conflict situation (as was the case here), both opponents will finally recognize that when one party is nonassertive, a disequilibrium is established which can only lead to another conflict. This realization is bound to result in a search for a strategy of conflict management that will allow both sides to be cooperative and assertive, namely, "collaboration." Once collaboration is established as the conflict management strategy, a state of relatively stable equilibrium is created, reducing the likelihood for further conflict.

This last point could have direct implications on the role of information systems practitioners in moderating the political use of e-mail in organizations. When e-mail is exploited politically in organizations, information systems professionals may be called upon to support one group of organization members against another. For example, a group of employees might ask for assistance in establishing an e-mail list with the intention of using the list to stage a political campaign against another group. In extreme cases, information systems professionals may be asked to disconnect from e-mail individuals or groups who are perceived by management to be politically disruptive. What position should information practitioners take in such events? Should they side with management? Should they side with employees? It remains for

the information systems profession and society as a whole to debate, and perhaps legislate, the use and abuse of e-mail for political and conflict management purposes.

#### 4 REFERENCES

- Bennis, W. G.; Berkowitz, N.; Affinito, M.; and Malone, M. (1958). "Authority, Power, and the Ability to Influence," *Human Relations*, Volume 11, Number 2, pp. 143-156.
- Boje, D. M., and Dennehy, R. F. (1994). *Managing in the Postmodern World: America's Revolution Against Exploitation*, Second Edition. Dubuque, Iowa: Kendall/Hunt Publishing Company.
- Clegg, S. (1995). "Some Dare Call It Power." Paper presented at the APROS Regional Meeting on Power and Politics, University of Western Sydney, MacArthur, Sydney.
- Filley, A. C. (1975). *Interpersonal Conflict Resolution*. Glenview, Illinois: Scott, Foresman and Company.
- Filley, A. C. (1978). "Some Normative Issues in Conflict Management." *California Management Review*, Volume 71, pp. 61-66.
- Finholt, T., and Sproull, S. (1990). "Electronic Groups at Work." *Organization Science*, Volume 1, Number 1, pp. 41-64.
- Foucault, M. (1977). *Discipline and Punish: The Birth of Prison*. Harmondsworth, England: Penguin Press.
- Foucault, M. (1980). *Power/Knowledge*. New York: Pantheon Books.
- Gamble, A., and Walton, P. (1972). *From Alienation to Surplus Value*. London: Croom Helm.
- Gandz, J., and Murray, V. V. (1980). "The Experience of Workplace Politics." *Academy of Management Journal*, Volume 23, Number 2, pp. 237-251.
- Geyer, R. F., and Schweiter, D. (1981). *Alienation: Problems of Meaning, Theory and Method*. London: Routledge and Kegan Paul.
- Giddens, A. (1985). *The Nation State and Violence*. Berkeley: University of California Press.
- Gramsci, A. (1971). *Selections From the Prison Notebooks*. London: Lawrence and Wishart.
- Habermas, J. (1974). *Theory and Practice*. London: Heinemann.
- Habermas, J. (1984). *The Theory of Communicative Action: Volume One – Reason and the Rationalization of Society*. Boston: Beacon Press.
- Hickson, D. J.; Hinnings, C. A.; Lee, C. A.; Schneck, R. E.; and Pennings, J. M. (1971). "A Strategic Contingencies Theory of Intraorganizational Power." *Administrative Science Quarterly*, Volume 16, Number 2, pp. 216-229.

- Hiltz, S. R., and Johnson, K. (1989). "Experiments in Group Decision Making: Disinhibition, Deindividuation, and Group Process in Pen Name and Real Name Computer Conferences." *Decision Support Systems*, Volume 5, pp. 217-32.
- Hirschheim, R., and Klein, H. K. (1989). "Four Paradigms of Information Systems Development." *Communications of the ACM*, Volume 32, Number 10, pp. 1199-1214.
- Kling, R. (1980). "Social Analysis of Computing: Theoretical Perspectives in Recent Empirical Research." *Computing Surveys*, Volume 12, Number 1, pp. 61-110.
- Kling, R. (1995). "Social Relationships in Electronic Forums: Hangouts, Salons, Workplaces and Communities." In R. Kling (Editor), *Computerization and Controversy: Value Conflicts and Social Choices*. San Diego: Academic Press.
- Lee, A. S. (1989a) "Case Studies as Natural Experiments." *Human Relations*, Volume 42, Number 2, pp. 117-137.
- Lee, A. S. (1989b). "A Scientific Methodology for MIS Case Studies." *MIS Quarterly*, March, pp. 33-50.
- Lee, A. S. (1991). "Integrating Positivist and Interpretive Approaches to Organizational Research." *Organization Science*, Volume 2, Number 4, November, pp. 342-364.
- Lee, A. S. (1994). "Electronic Mail as a Medium for Reach Communication: An Empirical Investigation Using Hermeneutic Interpretation." *MIS Quarterly*, June, pp. 143-157.
- Li, T. (1990). "Computer Mediated Communications and the Chinese Students in the US." *The Information Society*, Volume 7, Number 2, pp. 125-137.
- Lyytinen, K., and Hirschheim, R. (1988). "Information Systems as Rational Discourse: An Application of Habermas' Theory of Communicative Rationality." *Scandinavian Journal of Management Studies*, Volume 4, Number 1/2, pp. 19-30.
- Mann, M. (1986). *The Sources of Social Power, Volume 1: A History of Power from the Beginning to A.D. 1760*. Cambridge, England: Cambridge University Press.
- Mantovani, G. (1994). "Is Computer Mediated Communication Intrinsically Apt to Enhance Democracy in Organizations?" *Human Relations*, Volume 47, Number 1, pp. 45-62.
- Markus, M. L. (1983). "Power, Politics, and MIS Implementation." *Communications of the ACM*, Volume 26, Number 6, pp. 430-444.
- Markus, M. L. (1994a). "Electronic Mail as a Medium of Managerial Choice." *Organization Science*, Volume 5, Number 4, pp. 502-527.
- Markus, M. L. (1994b). "Finding and Happy Medium: Explaining the Negative Effects of Electronic Communication on Social Life at Work." *ACM Transactions on Information Systems*, Volume 12, Number 2, April, pp. 119-149.
- Matheson, K., and Zanna, M. (1989). "Impact of Computer Mediated Communication on Self Awareness." *Computers in Human Behavior*, Volume 4, pp. 221-233.



Mayes, B. T., and Allen, R. W. (1977). "Toward a Definition of Organizational Politics." *Academy of Management Review*, Volume 2, pp. 674-678.

- McGuire, T. W.; Kiesler, S.; and Siegel, J. (1987). "Group and Computer Mediated Discussion Effects in Risk Decision Making." *Journal of Personality and Social Psychology*, Volume 52, Number 5, pp. 917-930.
- Mechanic, D. (1962). "Sources of Power of Lower Participants in Complex Organizations." *Administrative Science Quarterly*, Volume 7, Number 3, pp. 349-364.
- Mezaros, I. (1970). *Marx's Theory of Alienation*. London: Merlin.
- Mintzberg, H. (1984). *Power In and Around Organizations*. Englewood Cliffs, New Jersey: Prentice Hall.
- Pliskin, N. (1989). "Interacting with Electronic Mail can be a Dream or a Nightmare: A User's Point of View." *Interacting with Computers*, Volume 1, Number 3, pp. 259-272.
- Pliskin, N.; Ball, L. D.; and Curley, K. F. (1989). "Impediments to Proliferation of Electronic Mail: A Study from the Users' Perspective." *Human Systems Management*, Volume 8, Number 3, pp. 233-241.
- Pliskin, N., and Romm, C. T. (1990). "Design of Charging Mechanisms According to the Interaction between Information Technology Type and Diffusion Life Cycle Phase." *DataBase*, Volume 21, Number 3, pp. 34-40.
- Pliskin, N., and Romm, C. T. (1996). "The Role of E-mail in an Industrial Dispute." *The Australian Journal of Information Systems*, Volume 3, Number 2, May, pp. 47-56.
- Rice, R. E. (1987). "Communication Technologies, Human Communication Networks and Social Structure in the Information Society." In J. Schement and L. Livrou (Editors), *Competing Visions and Complex Realities: Social Aspects of the Information Society*. Norwood, New Jersey: Ablex, pp. 107-120.
- Rice, R. E. (1992). "Contexts of Research on Organizational Computer-Mediated Communication." In M. Lea (Editor), *Contexts of Computer Mediated Communication*. Wheatsheaf, England: Harvester, pp. 113-144.
- Rice, R. E. (1993). "Using Network Concepts to Clarify Sources and Mechanisms of Social Influence." In W. Richards, Jr., and G Barnett (Editors), *Progress in Communication Sciences*, Volume 12. Norwood, New Jersey: Ablex, pp. 43-62.
- Rice, R. E., and Aydin, C. (1991). "Attitudes toward New Organizational Technology: Network Proximity as a Mechanism for Social Information Processing." *Administrative Science Quarterly*, Volume 36, June, pp. 219-244.
- Robbins, S. P. (1978). "Conflict Management and Conflict Resolution Are Not Synonymous Term." *California Management Review*, Volume 21, pp. 67-75.
- Robbins, S. P. (1974). *Managing Organizational Conflict: A Non-traditional Approach*. Englewood Cliffs, New Jersey: Prentice Hall.
- Robbins, S. P.; Waters-Marsh, T.; Cacioppe, R.; and Millett, B. (1995). *Organizational Behavior Australia and New Zealand*. Sydney: Prentice Hall.
- Robey, D. (1995). "Theories that Explain Contradiction: Accounting for the Contradictory Organizational Consequences of Information Technology." In J. I.

DeGross, G. Ariav, C. Beath, R. Høyer, and C. Kemerer (Editors), *Proceedings of the Sixteenth International Conference on Information Systems*. Amsterdam.

- Rogers, E.; Collins-Jarvis, L.; and Schmitz, J. (1994). "The PEN Project in Santa Monica: Interactive Communication, Equality and Political Action." *Journal of the American Society for Information Science*, Volume 45, Number 6, pp. 401-410.
- Romm, C. T., and Pliskin, N. (1996a). "Battle of the Sexes on E-mail – Or is It?" *The Information Society Journal*, Forthcoming.
- Romm, C. T., and Pliskin, N. (1996b). "Virtual Politicking: Toward a Theory of E-mail Use for Political Purposes within and between Organizations." In James L. Garnett and Alexander Kouzmin (Editors), *The Handbook of Administrative Communication*. New York: Marcel Dekker, Forthcoming.
- Ruble, T., and Thomas, K. (1976). "Support for a Two Dimensional Model of Conflict Behavior." *Organizational Behavior and Human Performance*, Volume 16, pp. 145-155.
- Siegel, J.; Dubrovsky, V.; Kiesler, S.; and McGuire, T. W. (1986). "Group Processes in Computer Mediated Communication." *Organizational Behavior and Human Decision Processes*, Volume 37, Number 2, pp. 57-187.
- Soh, C., and Markus, M. L. (1995). "How IT Creates Business Value." In J. I. DeGross, G. Ariav, C. Beath, R. Høyer, and C. Kemerer (Editors), *Proceedings of the Sixteenth International Conference on Information Systems*. Amsterdam.
- Sproull, R., and Kiesler, S., Editors (1991). *Connections: New Ways of Working in the Network*. Cambridge, Massachusetts: MIT Press.
- Thomas, K. (1976). "Conflict and Conflict Management." In M. D. Dunnette (Editor), *Handbook of Industrial and Organizational Psychology*. London: Routledge and Kegan Paul.
- Thomas, K. (1993). "Conflict and Negotiation Processes in Organizations." In M. D. Dunnette and L. M. Hough (Editors), *Handbook of Industrial and Organizational Psychology*, Second Edition, Volume 3. Palo Alto, California: Consulting Psychologists Press.
- Van Tassel, J. (1994). "Accept-Yak, Do Talk Back: PEN, the Nation's First Publicly Funded Electronic Network, Makes a Difference in Santa Monica." *Wired*, Volume 2, Number 1, pp. 78-80.
- Winner, L. (1992). "Silicon Valley Mystery House." In Michael Sorkin (Editor), *Variations on a Theme Park: The New American City and the End of Public Space*. New York: Noonday Press.
- Zuboff, S. (1988). "The Panopticon and the Social Text." *The Age of the Smart Machine*. New York: Basic Books.

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