December 2006

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ABSTRACT

A social issue that has affected the value of information systems implementations in organizations is resistance to change. While a great deal is known about the ways in which people interact with each other and affect the use, and implementation of information technology, the use of collaboration technologies in assessing the outcomes of organizational processes is still in its formative stages. This paper investigates the use of a Group Support System (GSS) in assessing the level of resistance to change among employees of a top four consulting company going through an acquisition of its major businesses. Senior, executive, to middle management level employees of this firm were conducting a game designed to help then in understanding and managing change. This Change Challenge Game was conducted through role playing of decision makers whose aim is to arrive at mutually agreeable outcomes. Following an analysis of the GSS from seven sessions comprising five different roles, this paper provides insight into the types of resistance to change encountered per role. The contribution of this paper is in the framework that maps categories of resistance to change with the roles encountered organizations of this type.

Keywords

Organizational change, resistance, participation, relationships, collaboration.

INTRODUCTION

According to the Standish Group's 2004 third quarter report, 29% of all projects succeeded (delivered on time, on budget, with required features and functions), 53% were challenged (late, over budget and/or with less than the required features and functions), and 18% failed (cancelled prior to completion or delivered and never used) (Standish Group, 2004). The CHAOS report cites User Involvement, Executive Management Support, and Clear Statement of Requirements as the top three criteria for success in IS projects. The existence of a hard working staff was considered to be least important in ensuring success of IS projects (Standish Group, 2006).The high incidence of implementation failures has traditionally been attributed to a lack of stakeholder participation in information systems development (Markus and Robey, 1988; Franz and Robey, 1984; Land and Hirschheim, 1983; Avison and Wood-Harper, 1990). Consequently information systems development methodologies such as ISAC (Lundberg, Goldkuhl, and Nissen, 1982), ETHICS (Mumford and Weir, 1979), and techniques such as Joint Application Development (Andrews and Leventhal, 1993) include participation. Even current wisdom on the use of traditional information systems development methodologies such as Structured Analysis and Design, SSADM, and information engineering (Downs, Clare, and Coe, 1988; Martin and Finkelstein, 1981) are suggested as tools for participation. Arguments for participation include that it 1) is seen to allow the interests of the individuals who must use the system to be protected, 2) provides the means through which individuals can use the system as a basis for re-design of their jobs and working environment, 3) facilitates compliance with results of decision making, 4) increases motivation leading individuals identifying with the system they design towards higher productivity and more efficiency, and 5) enables the system to be constructed in such a way as to provide the best possible fit between the needs of the organization and those who work for it (Land and Hirschheim, 1983; Mumford, 1981; Montazemi, 1988; Franz and Robey, 1986). These arguments point towards the overall benefit that participation improves the prospects of developing systems that are both technically and organizationally valid (Newman and Robey, 1992).

However, evidence supporting these benefits of participation is at best contradictory. In a study carried out by Jarvenpaa and Ives (1991) of 83 US firms, the CEO's perception of IT appeared to be a more powerful predictor of a firm's progressive use of IT rather than a CEO's personal participation. Newman and Robey (1992) report on episodes in which users rejected a system because participation had resulted in conflict between the users and the computer centre. As the development of information systems brings together people from different departments, Robey et al. (1989) suggest that the potential for conflict in systems development is great and potential disagreements are likely to become manifest under conditions of high interdependence among group members in project meetings. Further reasons for this contradiction have been attributed to reasons such as involving users in the design process may lead potential delays caused by having to deal with multiple user groups and possible sub-optimal system design because of the involvement of competing user groups (Land and Hirschheim, 1983).

This suggests that resistance to change is a social phenomenon in which multiple user groups interact in ways that most likely jeopardizes the success of an information system. Kurt Lewin (1947) first used the term resistance to change as a systems concept. This means that resistance found in a system can affect managers and employees as well as other roles in an organization. The question being investigated in this paper is how does resistance to change take place in organization change involving multiple stakeholder interests? This research considers the multiple roles on a top four consulting company going through a divestiture. A Change Challenge Game was created to enable senior, executive, to middle management level employees of this firm to carry out roles that were assigned based on a hypothetical insurance company's issues. This Change Challenge Game was conducted through role playing of decision makers whose aim was to arrive at mutually agreeable outcomes regarding the implementation of an information systems project. The following sections describe the research setting, game, and methodology. The theoretical background is used to put the results of the participant behaviors in the context of how they resisted change. The results of the GSS sessions from seven games comprising five different roles are analyzed to provide insight into the types of resistance to change encountered per role. The contribution of this paper is in the framework that maps categories of resistance to change with the roles encountered in organizations of this type.

METHODOLOGY

According to Klein and Myers (1999) Information Systems (IS) research can be classified as interpretive if it is assumed that our knowledge of reality is gained through social constructions such a language, consciousness, shared meanings, documents, tools, and other artifacts. Interpretive methods of research in IS are “aimed at producing an understanding of the context of the information system, and the process whereby the information system influences and is influenced by the context” (Walsham, 1995, pp 4). This research follows an interpretive approach in which grounded theory is used for the discovery of theory from data systematically gathered and analyzed from the research process (Strauss and Corbin, 1998).

The research site was a workshop on change management held at a European university for participants who came from the management team and employees of a large multinational consulting firm. In this study participants role-played as actors in a multinational corporation going through a transformation. The participants were affected by the implementation of an information system in the Change Challenge Game. The Change Challenge Game was designed to enable participants to experience resistance to change. The participants were put into situations that required them to recognize resistance to change, identify the forms that it took, and manage it. The participants were divided into groups, each representing different roles. The participants worked with colleagues whose roles were the same as their own. The roles included board members, insurers and underwriters, agents, ICT (Information and Communications Technology) services, and clients. Each player was given a packet describing their role, responsibilities, and services they offered. The packets also contained the participant’s particular interests and work processes. Altogether there were ninety-one participants; however two participants did not identify their roles on the final questionnaire. Table 1 shows the breakdown of the groups.

The participants worked together towards a goal of efficiently implement and effectively use an information system. They played out their role based on set conflicts and eventually negotiated agreements on a way to move the project forward to completion. Reflection during the game was facilitated through the use of *GroupSystems*™. The electronic group support system was used to draw attention to and discuss problems arising from resistance to change. Participants generated as many instances of resistance encountered in the role playing as they could. These types were then categorized. Then players provided reactions to why they think the types of resistance took place (i.e. underlying causes).

The data from the GSS sessions was organized into conceptual categories and their properties were also identified in the transcripts of electronic collaboration. This transcript data was analyzed using Strauss and Corbin’s (1998) open coding method. Open coding was used to conceptualize raw data by naming and categorizing the phenomena through close examination of the data. During open coding, data were broken down into discrete parts, closely examined and compared for similarities and differences. The results of this are presented in the findings section and analyzed based on the resistance to change behaviors identified from the following theoretical lens.

Role Count	
Board Members	17
Insurers & Underwriters	18
Agents	18
ICT Services	18
Clients	18
Total	89

Table 1. Study Participant/Role Count.

THEORETICAL BACKGROUND

The theoretical lens described in this section was developed in order to identify the types of behaviors encountered in the management game. When a new technology system is introduced into an organization the organization makes changes in order to accommodate the new system. Early theories of resistance to change suggested that resistance to change should be eliminated because it was considered dysfunctional behavior from users (Marakas and Hornik, 1996). However, in most cases resistance to change that threatens individual or group territory, limits autonomy, reduces employee influence, adds to employee workload, or is basically dumb, are based on sincere doubts (Keen, 1981; Marakas and Hornik, 1996). Keen (1981) recognizes that members of an organization do not all have the same ideas on what is in the best interest for an organization. This understanding has led to new theories of resistance to change which do not suggest this behavior is dysfunctional (Marakas and Hornik, 1996). New methods for introducing change include increased communication with users through participation in design stages and conflict resolution. Marakas and Hornik (1996) also suggest that resistance to change can be the first sign that a new system will be dysfunctional.

Marakas and Hornik, (1996) introduce Fine's model of P-A behavior to the discussion of resistance to change. They suggest that the uncertainty that comes with organizational change allows for the conditions of P-A behavior and can further lead to passive resistance misuse (PRM). They describe each element of the model and how an employee can display that behavior (e.g. resistance involves stubbornness, reactance involve procrastination). Once a change has occurred, its success must be measured. In one review, Marakas and Hornik (1996) identified nine measures of successful system implementation; including user satisfaction, system use, system quality, system acceptance, return on investment, information economics, business value, IT and firm market value relationships, and IT and firm performance. A review of past IT implementation in an organization has found that the implementation needs involve both technical and social systems (Marakas and Hornik, 1996). Resistance to change is one of the social concerns in organizational change.

It is true that not all organizational changes are successful. In order to increase the odds for success, Keen (1981) suggests that successful and effective implementation relies on small scale projects and incremental change in most cases. These small changes can be strung together leading to long term innovation and change. Similar to the term resistance to change is the term counter implementation. Keen (1981) uses the term counter implementation to mean the actions of organization members who want to prevent disruption or change in an organization. He suggests that this is most likely to occur when outsiders bring in new systems or technology. This resistance to change is often brought on from the idea that the costs of change are greater than the perceived benefits and is often valid from the viewpoint of the resistors. However, on the other hand the change sellers assume the proposed change is positive.

Another recommendation comes from a 15 year case study observing the introduction of a new financial system in an organization (Markus, 1983). The author suggests that these recommendations can help managers and systems analysts manage the change in an organization when implementing new IT systems. She separates implementer beliefs into people-determined (i.e. people determines a system), system-determined (i.e. systems determine people's beliefs), and interaction theory (i.e. system designs are a product of designer and user relationships) views of resistance (Table 2). While each of the three theories has individual recommendations, overall the author recommends interaction theory.

People-Determined	System-Determined	Interaction Theory
Educate users (training)	Educate designers (better technology	Fix organizational problem before introducing systems
Coerce users (edicts, policies	Improve human factors	Restructure incentives for users
Persuade users	Modify packages to conform to organizational procedures	Restructure relationships between users and designers
User participation (to obtain commitment)	User participation (to obtain better design)	User participation is not always appropriate

Table 2: Theories of resistance: recommendations for implementation (Excerpted from Markus 1983).

One way to prepare for resistance to change in an organization is to manage the organization change. Keen (1981) introduced a tactical model for describing and managing change which combined ideas from the Lewing-Schein framework and Kolb and Frohman's model of the consulting process (Figure 1). Both ideas have been used in IT implementations. The figure shows the large amount of work that needs to take place before a change happens, the difficulty of gaining system acceptance in an organization so that it will be successful, and problems of identifying goals and success criteria.

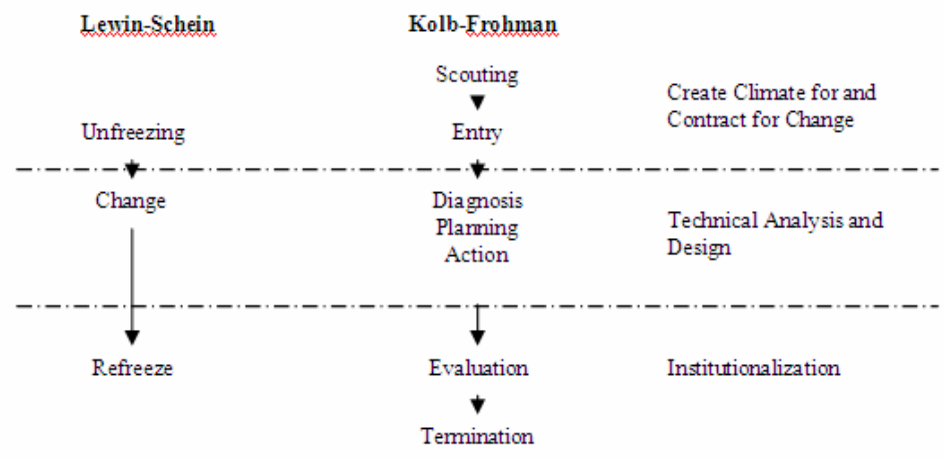

Figure 1. Tactical Model for Describing and/or Managing Change (Excerpted from Keen 1981)

Keen's (1981) argument is to understand that IT implementation is political. He recommends more research be done in the political aspects of IT development. To make this point clear, Keen (1981) used Leavitt's classifications of organizations to show that when one component changes, specifically technology, the other components must also change to balance out the impact. The research reported here attempts to capture the social and political aspects of resistance to change by investigating the interactions among participants with distinct vested interests that conflict with each other. The following sections illustrate the resistance to change behaviors per role. An analysis of these reveals certain forms of resistance to change that are more prevalent for particular types of people in certain roles. This has implications for further research and practice.

RESULTS AND ANALYSIS

In this section the analysis of the GSS session transcripts are presented. The data collected through the GSS sessions related to the participants' reactions to the key milestones in the game. These included presentations to the board relating to each stakeholder group's argument for or against the proposed change, voting on each stakeholder group's recommendations and reactions to the board's decisions. The GSS transcripts reflected the vested interests of each stakeholder group and their opinions of the other groups. The participants were divided into stakeholder groups representing the following roles relating to the task: Insurers and Underwriters, Agents, Members of the board, Clients and Information and Communication Technology (ICT) services. The participants are given their case packets relating to their roles and specific tasks relating to the organizational change and information system implementation of a large insurance company called Asset Management

(fictional name based on real events and information of a real company). The task related to a key event: Asset Management had organized a Strategy Level Meeting in which all they key players were invited to help implement the Transformation Plan. The game comprised of the following steps:

1) Introduce Game and Asset management's problem: Transformation of business to provide better service to clients through the use of new ICT. This requires changing current ICT services.

2) Assignment 1: *How can you provide better services to clients? Think of what ICT services would you require to help you provide better services?*

3) Role play 1: Participants are assigned to their stakeholder groups and meet in break out rooms to carry out assignment. Participants' presentations stated how they (in their respective roles) expected the transformation to help Asset Management provide better services to clients. Each group presented its plan for making the company a success.

4) Reflection 1*: How could you to provide better services through this new ICT infrastructure?*

5) Role play 2: This took place using the GSS. The session was set up to 1) allow participants to generate as many ideas as possible about the ways in which they think they could provide better services and 2) evaluate these ideas on the basis of the ways in which they could provide better services and could not provide better services.

6) Assignment 2*: Who do you think does not want your plan to succeed? Why do you think there is resistance to your plan?*

7) Role play 3: The role-play took place in the break out rooms. Participants remained in their roles and were asked to think about the resistance they experienced. They discussed with their colleagues the above two questions and prepared possible answers.

8) Reflection 2*: Why do you think there is resistance?*

The reflection took place in the GSS Room (TR). The session was set up to enable participants to generate as many possible 1) instances of resistance encountered in role play, categorize these into 2) types of resistance encountered and 3) focus on underlying causes. The third activity in this session enabled participants to focus in on the different types of resistance and provide their own reactions to why they thought the types of resistance took place. The instructor provided material at key learning points

9) Assignment 3: *What is your leadership strategy for managing resistance?*

10) Role play 4: The participants remained in their roles. Having developed these the whole day, they were ready for some "leadership training" through which enacted strategies for managing change. In the break out rooms, the participants developed strategies for managing change on the basis of their experience thus far and suggestions provided by the instructor.

11) Reflection 3: *How are you going to manage the resistance?*

This reflection took place in the GSS Room (TR). On the basis of the types of resistance to change identified in the afternoon session, the participants 1) commented on how they would manage the resistance, and 2) identify the different types of change management strategies that they could follow. The instructor provided key inputs enabling them to develop and discuss their "own" leadership styles.

12) Discussion on Resistance to Change. Debrief. End Game.

After playing the game, the participants were asked to reflect on presentations and decisions resulting from the voting and compare these to the board decisions. The session transcripts were first labeled based on the type of resistance to change behaviors that were being identified and then categorized per stakeholder group – depicted as roles in the following table.

	Roles of Stakeholder Groups					
Forms of Resistance to Change	Board	Insurers & Underwriters	Agents	ICT Services	Clients	**Totals**
Lay low	2	2			3	**7**
Deflect goals	4		2	4	2	**12**
Divert resources			2			**2**
Increasing complexity	18	4	2	5	3	**32**
Inside knowledge	9	2	2	3		**16**
Use of incidents and details to oppose change	3		2	5		**10**
Keeping things vague	11			1		**12**
Bears on the road	4					**4**
Attacking the integrity of the implementers	3					**3**
Apathetic behavior	1					**1**
Panic and hysteria	7					**7**
Backstabbing	1					**1**
Questioning legitimacy	10	7	3	3	2	**25**
Slowing down process	2		3	2	2	**9**
Power play	3	1	1	3		**8**
Changing the focus	3	3	1	1	3	**11**
Focus on the details	3	5	2	2	1	**13**
Request for clarification	17	3	7	5	14	**46**
Defining own interest	2	9	5	4		**20**
Flexible steering	1		2			**3**
Skepticism with respect to the proposals	4	1		7	1	**13**
Buying time	1			3	1	**5**
Bringing up unrelated issues	1	2	2	3		**8**
Questioning qualifications		3	3	4	3	**13**
Questioning goals	7	1		2	3	**13**
Refocus attack	3	5	6	3	4	**21**
Increasing requirements	2		2	2	2	**8**
Doubting results	4		3	2	1	**10**
Testing the boundaries	2		1	1	1	**5**
Divert attention	4	5	3	1	1	**14**
Delaying tactics	3	2	1	3	1	**10**
Totals	**135**	**55**	**55**	**69**	**48**	**362**

Table 3: Role Resistance Count

The above results suggest that the Board members encountered the most resistance to their plan for change. They encountered resistance to change behaviors relating to: increasing complexity of the task (18 occurrences), multiple requests for clarification (17), keeping things vague (11), and questioning the legitimacy of their plan (10). The Board was the only group that identified inside knowledge, keeping things vague, panic and hysteria, and questioning goals as forms of resistance to

change. The comparatively high level of resistance to change encountered by this group is not surprising as the roles played by Board members meant that they had to make difficult and often unpopular decisions relating to the change process.

The ICT Services encountered the second most number of resistance to change behaviors from the other stakeholders. While there was no one overwhelming form of resistance to change encountered by this group, they reported skepticism with respect to their proposals (7), frequent requests for clarification (5), keeping things vague (5) and increasing complexity (5) as part of the scope creep that they were grappling with. In addition they faced specific behaviors of increasing requirements (2), doubting results (2), and the use of incidents and details to oppose change (5). In general the role this stakeholder group had to manage was a difficult one as the whole organization depended upon the efficient functioning of the ICT infrastructure but the staff was overextended and unable to meet the demands of an increasingly disgruntled workforce.

The Insurers and Underwriters encountered very distinct forms of resistance to their plan. Their legitimacy was questioned on 7 occurrences; they felt that other participants defined their own interests (9) above that of the organization. They also felt that there was a focus on details (5), attacks were being focused on them (5), and attention diverted (5) from the key problems. The roles carried out by this stakeholder group entailed the minimizing of insurance claims and maximizing the return on their investments. Their task packet involved investigating their portion of the insurance claim on the twin towers in New York. Their arguments were not very popular with agents who had secured the deal.

The insurance Agents encountered a broader range of resistance to change behaviors. These included requests for clarification (7), refocus attack (6), defining own interests (5), bringing up unrelated issues (2), and questioning qualifications (3). The roles carried out by the agents involved working with clients to bring in new insurance policies, manage existing policies and provide services to clients.

The Clients encountered the least forms of resistance to change. They indicated requests for clarification (5) as the most common form of resistance that they encountered. They also encountered behaviors relating to questioning of their qualifications (3), questioning of their goals (3), a refocusing of attack (4), and increasing requirements of them for information (2). Their roles were the simplest in that had to make sure that their concerns were addressed and that they continue to get the services they expected.

All the groups encountered the resistance to change behaviors of requests for clarification (46), increasing complexity (32), questioning legitimacy of plans (25), refocusing attacks (21), diverting attention (14), and delaying tactics (10). It is interesting that every group, except for the Insurers and Underwriters, identified request for clarification as a form of resistance to change that they encountered.

These results suggest that forms of resistance to change encountered depend on the types of roles carried out by each stakeholder group. The distinctions in the types of resistance to change suggest that the roles with the greater levels of responsibility (such as the Board Members and ICT Services) than the other participants encountered greater resistance to change. It appears that for a given role, certain forms of resistance are more prevalent than others and have a different set of outcomes. The large number and types of resistance to change behaviors encountered by Board Members related to the type of decisions that they made and their unwillingness to change their decisions despite the forms of resistance encountered. This is consistent with the findings of Marakas and Hornik (1996) who suggest that resistance to change can be the first sign that the new system as it relates to change is dysfunctional. The resistance encountered by ICT Services suggested that the IT implementation needed to address concerns relating to specific tasks but also the rigid nature of the system as it related to the transformation of the organization. The political nature of IT implementation as suggested by Keen (1981) is apparent in this analysis in that of all the different types of resistance encountered by ICT Services, skepticism, increasing complexity, deflecting goals and use of IT incidents to oppose overall change were most prevalent. If the system itself was indeed flawed, a greater number of requirements would have been requested by the participants. In this case, there were only two instances in which requirements were increased. Armed with these insights, the following section describes ways in which resistance to change can be mitigated where systems implementations are part of organizational transformations involving multiple stakeholder groups.

IMPLICATIONS FOR RESEARCH AND PRACTICE

The results thus far have distilled resistance to change behaviors from the participants of the Change Challenge Game. These behaviors were then mapped on to the roles carried out in each stakeholder group. The analysis has highlighted the differences in the types of resistance to change encountered per role. It suggests that while organizational change in itself brings about resistance to change, the types of behaviors vary per role and the outcomes, decisions or products (systems in the case of IT Services) generated by each stakeholder group cause specific types of resistance to be encountered. In order to mitigate these types of resistance generated by specific stakeholder groups, the effects from organizational change and information system implementation need to be considered. The following strategies for managing resistance to change were compiled from a combination of participants' strategies and our own review:

> ***Plan and set objectives:*** Set clear milestones in the plan, while being flexible about the goals, and discuss project plans and explain priorities. Clearly state the mission statement and objectives, assign clear deadlines, and assign deadlines to resistant people. Then state the rules of the game clearly by setting clear goals, timelines, and priorities. Define clear deliverables, performance indicators, and incentives.
>
> ***Communicate***: Explain why aspects/scopes meet the goals of the company and communicate the plan. Communication about a roadmap to final solution and impact on individuals should be undertaken. Keep communications around the change clear and inform all necessary parties with the relevant information. Then evaluate the risks and communicate the challenges
>
> ***Scope the project***: Stay very focused on the major topics and defer items that are out of scope. Make sure that the scope is clear. Write down the over scoped items and declare them out of scope and get back to them at the end of the project.
>
> ***Manage expectations***: Put the project in the right perspective, by preparing a clear definition of the projects. What are the goals? How do you expect to get there? Bring the project into reasonable proportions by setting out a plan that is realistic and monitor progress of plan (and make sure that remains within scope). Make sure it is clear what the interest is for the different parties.
>
> ***Dissipate uncertainties***: Provide clear outlines of strategy, process or issues. Give more explanations and clarifications, and make clear that the project can not be sabotaged. Define the uncertainties and ask them how they think the participants should handle the uncertainty and what the real risks are. Don't deny uncertainties but describe them during the project and get back to them.

These strategies for managing resistance to change assume that IT implementation is a political process in which multiple stakeholders interact in response to organizational change. Using these strategies requires an understanding of the organizational processes affected by the IT implementation as it relates to organizational change.

Further research is required into facilitation techniques designed to manage conflicts between divergent stakeholder interests. Case studies of systems implementations could shed further light into the extent to which the resistance to change behaviors investigated in this paper match the roles set up in the game.

CONCLUSIONS

This paper has investigated a social issue that has affected the success of information systems implementation projects for many years; resistance to change. While information systems implementation failures has been attributed to the lack of user participation, recent studies have found that participation of users in the information system development process may actually lead to sub-optimal systems due to multiple stakeholder interests. In investigating this issue the research question, how does resistance to change take place in organization change involving multiple stakeholder interests was explored. A Change Challenge Game was created to enable senior, executive, to middle management level employees of this firm to carry out roles that were assigned based on a hypothetical insurance company's issues. This Change Challenge Game was conducted through role playing of decision makers whose aim was to arrive at mutually agreeable outcomes regarding the implementation of an information systems project. The results of this research suggest that resistance to change is dependant upon the outcomes generated by the roles played by multiple stakeholders. The analysis revealed specific types of resistance to change behaviors encountered per role and the types of roles that generate the resistance to change behaviors. In recognizing that information system implementation is a political process, strategies for mitigating resistance to change should consider how organizational processes change with IT implementation. Further research should consider the extent to which the resistance to change behaviors uncovered in this paper match the roles set up in the game.

REFERENCES

1. Andrews, D. C. and Leventhal, N. S. (1993) Fusion integrating IE, CASE, and JAD: A handbook for reengineering the systems organization, Prentice Hall, Englewood Cliffs.
2. Avison, D. E. and Wood-Harper, A. T. (1990) Multiview: An exploration of information systems development, Blackwell, London.
3. Dent, E. B. and Goldberg, S. G. (1999a). Challenging resistance to change, *The Journal of Applied Behavioral Science*, 35, 1, 25-41.
4. Dent, E. B. and Goldberg, S. G. (1999b). Resistance to change: A limiting perspective, *The Journal of Applied Behavioral Science*, 35, 1, 45-47.
5. Dickson, G. W. and Simmons, J. K. (1970) The behavioral side of MIS: Some aspects of the people problem, *Business Horizons*, 13, 4, 59-71.
6. Downs, E., Clare, P. and Coe, I. (1988) Structured systems analysis and design method: Application and context, Prentice Hall.
7. Franz, C. R. and Robey, D. (1984) An investigation of user-led system design: Rational and political perspectives, *Communication of the ACM*, 27, 1202-1209.
8. Jarvenpaa, S. L. and Ives, B. (1991) Executive involvement and participation in the management of information Technology, *MIS Quarterly*, 15, 2, 204-227.
9. Keen, P. G. W. (1981) Information systems and organizational change, *Communications of the ACM*, 24, 1, 24-33.
10. Klein, H. K. and Michael D. Myers. (1999) "A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems," *MIS Quarterly, Special Issue on Intensive Research* 23(1): pp. 67-93.
11. Land, F. and Hirchheim, R. (1983) Participative systems design: Rationale, tools, and techniques, *Journal of Applied Systems Analysis*, 10, 91-107.
12. Lewin, K. (1947) Frontiers in group dynamics: Concept, method and reality in social sciences; social equilibria and social change, *Human Relations*, 1, 5-41.
13. Lundberg, M., Goldkuhl, G. and Nissen, N. (1981) Information systems development: A systematic approach, Prentic Hall, Englewood Cliffs.
14. Marakas, G. M. and Hornik, S. (1996) Passive resistance misuse: overt support and covert recalcitrance in IS implementation, *European Journal of Information Systems*, 5, 3, 208-219.
15. Markus, M. L. (1983) Power, politics and MIS implementation, *Communications of the ACM*, 26, 430-444.
16. Martin, J. and Finkelstein, C. (1981) Information Engineering, Prentice Hall, Englewood Cliffs.
17. Markus, M. L. and Robey, D. (1988) Information, technology and organizational change: Cause structure in theory and research, *Management Science*, 34, 5, 583-598.
18. Montazemi, A. R. (1988) Factors affecting information satisfaction in the small business environment, *MIS Quarterly*, 239-256.
19. Mumford, E. (1981) Participative systems design: Structure and method, *Systems, Objectives, Solutions*, 1, 5-19.
20. Mumford, E. and Weir, M. (1979) Computer systems in work design: The ETHICS method, Wiley, London.
21. Newman, M. and Robey, D. (1992) A social process model of user-analyst relationships, *MIS Quarterly*, 249-266.
22. Robey, D., Franz, C., Franz, R., and Farrow, D. L. (1989) Group process and conflict in system development, *Management Science*, 35, 10, 1172-1191.
23. Standish Group. (2004) *2004 Third Quarter Research Report*, Retrieved February 27, 2006 from the World Wide Web: http://www.standishgroup.com/sample_research/PDFpages/q3-spotlight.pdf.
24. Standish Group. (2006) Unfinished Voyages: A Follow-Up to The CHAOS Report, Retrieved February 27, 2006 from the World Wide Web: http://www.standishgroup.com/sample_research/unfinished_voyages_1.php..
25. Strauss, A. and J. Corbin. (1998) Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Thousand Oaks,London:Sage.
26. Walsham, G. (1995) "The Emergence of Intrepretivism in IS Research." *Information Systems Research***.** 6(4):pp. 376-394.