DE-ESCALATING THE IT-PROJECTS

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ABSTRACT

Escalation stickins with an ailing project beyond rational justifications. This happens because in the face of negative feedback, decision makers are strangled between whether to stick with or quit the dying project. Environmental uncertainty has been identified as the root cause of the escalatory behavior. This uncertainty emanates from several sources relating to individual, group, organization and broader environmental factors. This paper argues the premise that effective communication can help create an environment whereby workforce can develop an organized action thereby distributing the responsibility across the whole workforce and not the individuals – leading to the possible reduction of escalatory behavior in IT projects.

Keywords: IT Projects, Escalatory Behavior, Causes, Tactics, Uncertainty Reduction, Effective Communication, De-Escalation

1. INTRODUCTION

There is an overwhelming regularity of escalation among IT projects that casts tremendous burden on the economy (Chee-Wee et al., 2006). Keil et al., (2000) found
that “between 30% and 40% of all IS projects exhibit some degree of escalation.” Likewise, escalation is a common and costly problem among IT Projects (Pan et al., 2004). In the words of Warne and Hart (1996) “project failures in IT are a costly problem and troubled projects are not uncommon.” Whatever the causes of failure, ‘escalatory behavior’ takes on the underlying role of leading more aggravated decision-situations for the IT project. As Keil et al., (1998) put it, “very often the amount of money already spent on a project (sunk cost) along with other factors can bias managers toward continuing to fund the project.”

The problem of escalation, however, is neither simple to comprehend nor addressable outright because, “we know little about how decision makers actually experience mounting evidence of failure in a project; what it feels to be confronted with a dilemma of whether to stick with an ailing project or abandon it; and most importantly, what informs their actions (Drummond, 1995).”

Several behavioral models have been suggested as to explain the nature and process of this problem. For example, “decision makers are susceptible to the influence of self-serving psychological biases, which departs from the rational decision making model of investment (Chee-Wee et al., 2006).” Likewise, Chee-Wee et al., (2006) suggest, decision makers tend to escalate their commitment to a failing course of action and undergo the risk of negative outcomes in order to self-justify prior behavior or avoid revealing their errors to others.

Mark Keil et al., (2000) developed a solution model using self-justification theory, prospect theory, agency theory, and approach avoidance theory. Pan et al., (2004) used the learning model of “unfreezing-changing-refreezing” to understand the escalatory behavior in IT projects and thereby figure out a solution model. However, almost all of these models are efforts to improve ‘COMMUNICATION’ between the project stakeholders. This research is a contribution in the same line of exploration.

2. ESCALATORY BEHAVIOR

Research shows that “if organizational culture is one that: a. makes people unwilling to admit failure or b. values consistency in behavior, then it is more likely that decision makers may even stick with their bad decisions for more than rationally required (Brockner et al., 1986).” When this happens “projects take a life of their own thereby eating up more resources and delivering no real value (Warne and Hart, 1996; Keil et al., 2000; Hall, 2003).” Research reveals that organizations continue to invest in their original course of action even after receiving substantial negative information concerning its advisability (Chee-Wee et al., 2006). This continued investment eventually results in greater losses for the organization than if a change in the course of action was instituted (Biyalogorsky et al., 2004).

2.1 What: The Definition

It is said that “a trapped administrator is one who remains inflexible to change in
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the face of negative consequences (Fox and Staw, 1979)”. Helga Drummond (1995) says that escalation is “a situation where decision makers are believed to compound the problem by persisting irrationally.” She (1991) found that “escalation happens due to the nature of investment, psychological factors and organizational factors, while potential for escalatory behavior shoots up if costs exceed predictions, revenues fall short of prediction and both these occur simultaneously.” So it can be asserted that IT projects are gambles and will continue as such (Hall, 2003).

2.2 Why: The Causes

Most of the researchers agree on the four fundamental causes of escalation as being: a. project-related. b. human psychology/personality c. social and d. organizational (see for example, Brockner, 1992; Keil, 1995, 1998, 2000; Hall, 2003; Biyalogorsky et al., 2004; Pan et al., 2004; Chee-Wee et al., 2006; Kundi and Nawaz, 2006). Researchers, however, express the causes in different ways. Fox and Staw (1979) suggest that a manager escalates if “he makes the initial decisions (responsibility pressure)” and/or “is under the pressure of being responsible for the consequences.” They also point out that job insecurity and policy resistance also increase the commitment to a previously chosen decision.

A decision maker faced with negative feedback about a project may feel the need to reaffirm the wisdom of time and money already sunk into the project (Kundi, 1997; Kundi et al., 2007). White (1986) asserts “commitment to a failing course of action is a need on the part of decision makers to maintain the illusion that they haven’t erred.” This happens because, as Staw and Ross (1981) put it, even in the face of negative feedback decision makers “continue investing commitment to a dying course on the assumption that short-term problems are the necessary costs/losses for achieving long-term large objectives.”

2.3 How: The Tactics Used

Several tactics are used by the escalating decision makers to protect their decisions, use of resources and thus themselves. This happens both at the cognitive and physical levels of expression. For example, Fox and Staw, (1979) found that decision makers “cognitively distort the negative feedback.” Warne and Hart (1996) record “when faced with failure, decision makers attempt to justify their position by manipulating information that is to be presented to others”, while, Brockner (1992) found that “powerful decision makers who are able to control information create false sense of progress.”

Drummond (1995) continues in the same line of evidence by documenting “trapped decision makers seek out that information which supports their opinion while rejecting the contradictory data.” Lacity and Hirschheim (1995) also come up with the same finding that managers “constantly justify their cost-service compromises to various stakeholders. The tactics used are: a. picking a reference group of only mediocre performers b. undermining the integrity of data collection process and c. selecting technical benchmarks which stakeholders cannot understand.”

Above points come together into the idea that the most dominant tool in the
hands of almost all the decision makers is feedback. They can manipulate communication and reporting systems. The decision makers “appear to seek out only that information which supports their prior decisions and ignore what contradicts them (Drummond, 1995).” Thus, adding fuel to the fire, those who have comparatively more control on information resources can be the experts in impression management.

3. ESCALATION IN IT-PROJECTS

There is a huge body of documented evidence about the escalatory dimensions of well-reported IS failure cases around the world (see for example, Ewusi-Mensah and Przasnyski, 1991, 1994; Sauer, 1993, 1999; McGrath, 1997; Kundi et al., 2007). However, it should not be forgotten that “failure in IT projects is a costly problem (Waema and Walshman, 1990).” Furthermore, “escalation can occur with any project but IT projects are more susceptible because it is very difficult to accurately estimate how much work has been completed (Keil, 1995).”

The reason to this fact is that “IT projects are always innovative therefore highly uncertain and risky by nature (Clark, 1994).” Likewise, “as organizations become more computerized, software projects will consume an ever-increasing amount of organizational resources (Keil, 1998 et, al.).” To err is human but project failure is wasteful and embarrassing. Both public- and private-sector projects seek to avoid failure (Hall, 2003).

4. DISCUSSION: DE-ESCALATION

To err is human; to forgive is not the policy of the administration.” The plethora of explanations and disagreements about the causes of escalatory behavior represents a challenge for both the organization and researchers (Biyalogorsky et al., 2004); However, solution models to understand and de-escalate have been suggested by researchers ranging from very simple to comprehensive guidelines. As said earlier, the issue is not that simple because, “even for the most profitable companies not all projects meet with success; cost overruns, revenue shortfalls and bad news of other sorts are all too common and often the decision to be made is when to cut off a losing project before it takes the resources down with it (Warne and Hart, 1996).” Given this, escalation can be controlled by reducing the environmental uncertainty through effective communication systems in the organization.

4.1 Uncertainty Reduction

Environmental uncertainty is frequently cited as the main underlying cause of escalation (see for example, Bowen, 1987; Brockner, 1992; Clark, 1994; Drummond, 1995; Keil et al., 1998, 2000; Biyalogorsky et al., 2004; Sharette, 2005; Chee-Wee et al., 2006; Kundi et al., 2007). For instance, “decision makers operate in somewhat of an
information vacuum; they lack data, which might help deciding whether it is wise to persist with the previous course of action? So it is the uncertainty surrounding the goal attainment which confuses the decision maker (Brockner, 1992).” It becomes a bigger issue when taken in the background of the fact that “there are differences among individuals in their perception and tolerance for uncertainty (Duncan, 1972).” All the organizations develop several communication systems to reduce uncertainty from the work environment of the managers. If these systems are weak, they themselves are exploited for escalation however, effectively structured and managed communication can ensure reduced uncertainty and thus less chances of escalation.

4.2 Effective Communication to De-Escalate

It is said that “we are worse in communication (Smith, 1997)” because of many reasons such as “under pressure decision makers discard information, avoid bringing in expertise and exploring new alternatives and simplify a problem to a point where it becomes manageable (Keen, 1981).” This situation can however be reversed by focusing on the communication aspects of the organization since “through effective communication, organized action can occur despite differences of interpretation among members of a group (Donnellon et al., 1986).”

The causes of escalation (independent variable) determine the shape and intensity of the escalatory behavior (dependent variable). However, this relationship is influenced by the managers through applying the ‘moderating variable’. “Moderating variable has strong contingent effect on the independent and dependent variables relationship (Sekaran, 1999).” It implies that the relationship between independent and dependent variables become contingent or dependent on a third variable. In our case the third variable is ‘effective communication,’ which if developed and practiced systematically, can moderate the negative impact of the cases thereby lessening the probability of escalatory behavior. This logic is illustrated in Figure 1.

The figure below suggests that the impact of causes on the decision makers’ escalatory behavior is controlled by creating an open culture of communication where failures are admitted without any fear of punishment. If organizational communication is enhanced the decision-situations become clear enough to at least cut down escalation because unhampered communication reduces uncertainty to the extent of mutual understanding.

Figure. 1 Escalation/De-Escalation Model
5. CONCLUSIONS

Escalation is not the result of a syndrome of decision errors. It is rather a decision dilemma where the decision maker is caught in such a situation that decision to ‘stick or quit’ becomes difficult due to the lack of relevant and timely data about ‘what exactly is going wrong?’ Given the environmental uncertainty rational decisions are hard to be taken and that is why it is said that escalation is a natural tendency.

Furthermore, personality factors are the moderating variables which influence the relationship of decision makers with the environmental uncertainty. Moreover, escalation is determined at least in part by the decision-maker’s unwillingness to admit that his prior allocation of resources to chosen courses of action were in vain.

REFERENCES

Biyalogorsky E., William B. and Richard S. (2004) Stuck in the past: Why managers exhibit escalation bias. Available at: http://www.fuquaworld.duke.edu/ www/fsc/frp3.jsp?pid=85. Accessed on 27 Oct, 2007 at 11:30am.

Bowen MG. (1987) The escalation Phenomenon Reconsidered: Decision Dilemmas or Decision Errors? Academy of Management Review. 12(1), pp. 52-66.

Brockner J. (1992) The Escalation of Commitment to a failing course of action: Toward theoretical progress. Academy of Management Review. 17 (1), pp. 39-61.

Brockner J., Houser R., Birnbaum L., Kathy D., Janet N., Sinaia and Rubin JZ. (1986) Escalation of Commitment to an ineffective course of action: The effect of feedback having negative implications for self-identity. Administrative Science Quarterly. 31, p. 109-126.

Chee-Wee T., Veiko T. and Eric Tze-kuan L. (2006) Agency relationships in the escalation of software projects: an options analytical perspective. Available at: http://www2.wiwi.hu-berlin.de/institute/organisation/Team_dt/Thiele/EscalationandDe-escalationofSoftwareProjects.pdf. Accessed on 31st Oct, 2007 at 10pm.

Clark TD Jr. (1994) Corporate systems management. Strategic Information Management - challenges and strategies in managing information systems. McGraw-Hill, New York; pp. 87-88.

Currie, W. and Galliers, B. (eds.) Rethinking management information systems: An interdisciplinary perspective. Oxford University Press; p. 51.

Donnellon A., Gray B. and Bougon MG. (1986) Communication, meaning, and organized action. Administrative Science Quarterly. 31, pp. 43-55.

Drummond H. (1995) De-escalation in decision-making: A case of a disastrous partnership. Journal of Management Studies. 23(3), pp. 265-281.

Duncan RB. (1972) Characteristics of Organizational Environments and Perceived Environmental Uncertainty. Administrative Science Quarterly. 17(3), pp. 313-327.
Ewusi-Mensah K. and Przasnyski ZH. (1991) On information systems project abandonment: An exploratory study of organizational practices. MIS Quarterly. March, pp. 67-83.

Ewusi-Mensah K. and Przasnyski ZH. (1994) Factors contributing to the abandonment of information System development Projects. Journal of Information Technology. 9, pp. 185-201.

Fox FV. and Staw BM. (1979) The trapped administrator: Effects of job insecurity and policy resistance upon commitment to a course of action. International Journal of Information Systems. 33 (2), pp. 247-251.

Hall P. (2003) Killing IT Projects. The Journal of Information Technology Management. 16(12) December. Available at: http://www.catalysisgroup.com/articles/losinggamble.pdf. Accessed on 27 Oct, 2007 at 11:30am.

Keen PGW. (1981) Information systems and organizational change. Communications of the ACM. 24(1), pp. 24-33.

Keil M. (1995) Pulling the plug: Software project management and the problem of project escalation. MIS Quarterly. December, pp. 420-447.

Keil M., Cule PE., Lyytinen K. and Schmidt RC. (1998) A framework for identifying software project risks. Communications of the ACM. 41(11), pp. 76-83.

Kundi GM, Allah N. (2006) IT-Organization Alignment. Gomal University Journal of Research, Gomal University, DIKhan, 22 (2), pp. 202-206.

Kundi GM, Allah N., Bahadar S. (2007) Politics in IT Projects. Gomal University Journal of Research, Gomal University, DIKhan. 23 (2), pp.211-215.

Kundi GM. (1997) Fundamentals of management information systems. 1st Ed. Saad Publications, DIKhan. PAKISTAN; p. 87.

Lacity MC. and Hirschheim R. (1995) Benchmarking as a strategy for managing stakeholder perceptions of IS. Journal of Strategic Information Systems. 4(2), pp. 165-185.

Mark K., Joan M., and Arun R. (2000) Why Software Projects Escalate: An Empirical Analysis and Test of Four Theoretical Models. MIS Quarterly, 24 (4) December, pp. 631-664.

McGrath GM. (1997) An implementation of data-centered information systems strategy: A power/political perspective. Failure and Lessons Learned in Information Technology Management. 1(1), pp. 3-17.

Pan G., Pan S., Newman M., and Flynn D. (2004) ‘Unfreezing-changing-refreezing’ of actors’ Commitment: the transition from escalation to de-escalation of commitment to information technology projects. Available at: http://csrec.lse.ac.uk/asp/aspecis/20040131.pdf. Accessed on 27 Oct, 2007 at 11:30am.

Ross J. and Staw BM. (1991) Organizational escalation and exit: Lessons from the shoreham nuclear power plant. Administrative Science Quarterly. 31, pp. 379-391.

Sauer C. (1993) Why information systems fail: A case study approach. Alfred Walker,
Henley-on-Thames, Oxfordshire; pp. 43-44.

Sauer C. (1999) Deciding the future for IS failures: Not the choice you might think. In: Sekaran U. (1999) Research methods for business: A skill-building approach. 3rd ed. John Wiley & Sons; p. 95.

Sharette B. (2005) Failing successfully. Available at: http://www.itmpi.org/assets/base/images/itmipriveterooms/robertcharette/FailingSuccessfully.pdf - Accessed on 27 Oct, 2007 at 11:30am.

Smith A. (1997) Human computer factors: A study of users and information systems. McGraw-Hill; pp. 183-185.

Staw and Ross (1981) The Escalation of Commitment to a Course of Action. Academy of Management Review. 6(4), pp. 577-587.

Waema TM. and Walshman G. (1990) Information systems strategy formulation. Journal of Information Management. 18, pp. 29-39.

Warne L. and Hart DN (1996) The impact of organizational politics on information systems project failure-a case study. In: Proceedings of the 29th Annual Hawaii International Conference on Systems Science, IV; pp. 191-201.

White G. (1986) Escalating Commitment to a Course of Action: A Reinterpretation. Academy of Management Review. 11(2), pp. 311-321.