

# **Blowing the Whistle: How IS Auditors Can Turnaround Troubled Software Projects — And Why They Sometimes Don't!**

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### **Introduction and Background**

Billions of dollars are wasted each year on software projects that are either never delivered or in some way "fail to deliver" (Johnson, 1995). In many cases, projects seem to escalate beyond control, devouring scarce resources while failing to deliver business value. The problem is significant enough that entire books have been filled with stories of such projects (see, for example, Glass, 1998).

In 1997, the IS Audit and Control Journal published the results of a study that was undertaken to understand more about the prevalence of IS project escalation and the factors that cause it (Keil and Mann, 1997a; Keil and Mann, 1997b). The results were startling: IS audit and control professionals indicated project escalation occurs on 30-40% of all IS projects. Escalation was found to be caused not only by project management related factors, but also by psychological, social, and organizational factors (Keil and Mann, 1997b).

Unfortunately, reducing the incidence of project escalation is a subject that has received relatively little research attention (Keil and Robey, 1998). One approach that has been suggested is to conduct serious project audits (Keil and Mann, 1997b). IS auditors are in a unique position to provide an independent, third party, perspective on the status of any given project. But this begs the question of whether IS auditors perceive it as part of their role to monitor and report on instances of project escalation. The Keil and Mann (1997b) study provides some evidence on this point. In their study, subjects were asked to agree or disagree with the following statement:

*I believe it is part of my role as an information systems control professional to detect and report project escalation.*

The mean response to this question was 4.13 (on a 5-point scale) indicating agreement that detecting and reporting project escalation is considered part of the role of an IS control professional.

While IS control professionals clearly perceive a responsibility to report bad news—or blow the whistle—on a project, one may reasonably ask: "*In practice, how willing are IS control professionals to act in this capacity?*" After all, reluctance to transmit bad news—a phenomenon known as the "mum effect"—has been well documented (Tesser and Rosen, 1975). From research on whistle blowing, we also know that individuals may be particularly reluctant to transmit bad news when reprisal risks are perceived to be high or when the organization's senior management is viewed as being non-responsive to whistle blowers' concerns (Miceli and Near, 1992).

To answer the question of how willing IS control professionals are to blow the whistle, a field survey was conducted.

## **Method**

Respondents were drawn from a population of 75 IS auditors who indicated a willingness to participate in a follow-up study when they completed an earlier mail survey in 1995 (Mann, 1996). IS auditors were chosen for this study because we were interested in understanding more about their willingness to blow the whistle on troubled projects. All data for the present study were collected through telephone interviews.

Rather than specifying a precise sample size in advance, the principle of purposive sampling was used to guide data collection. This approach is recommended for research that is exploring new ground instead of testing established theories. In contrast to random sampling, purposive sampling calls for collecting data until meaningful patterns and relationships are detected and until "no new information is forthcoming from newly sampled units" (Lincoln and Guba, 1985, p. 202). This point was reached after 42 interviews.

The unit of analysis for this study is the project, and each respondent was requested to choose a single project for the interview. In most cases, the project was the same as the one identified in the earlier survey. The companies in which these systems were developed also represented a broad range of organizations and industries, thus ensuring a diverse sample.

The data for the present study were gathered using an interview protocol designed to investigate how troubled projects can be successfully turned around or sensibly abandoned (a process known as de-escalation). A portion of the interview protocol was designed to explore the subject of whistle blowing in a relatively unstructured fashion. In approximately 30 of the 42 interviews, subjects were asked to comment on the subject of whistle-blowing and the reluctance to transmit bad news. During this portion of the interview, subjects were asked: *Did someone "blow the whistle" on this project?* When the answer was "yes," additional questions were asked in order to learn more about who blew the whistle and why. Once the specifics of the project were ascertained, additional probes were used to: (1) gauge the subject's perceptions regarding whether or not it was appropriate for IS auditors to serve as whistle blowers, (2) determine whether the subject had ever played such a role in other projects, and (3) explore the factors that promoted or inhibited whistle blowing behavior. Interviews typically lasted between 30 and 60 minutes in duration and included questions that were not specifically directed toward understanding whistle blowing behavior. All interviews were tape recorded, transcribed, and then later subjected to content analysis.

First, we coded each case to isolate portions of the text explicitly dealing with whistle blowing. To facilitate coding, portions of the interview text were located in which the phrase "whistle blowing" was embedded. Next, these text fragments were analyzed to determine if there were any discernable patterns associated with whistle blowing behavior. Specifically, we sought to identify underlying factors that seemed to govern subjects' willingness to blow the whistle.

## Results and Discussion

Three interesting findings emerged in analyzing the interview data. First, many IS control professionals expressed an unwillingness to blow the whistle on a troubled software project. Second, the auditors saw some organizational climates as being much more conducive to whistle blowing than others. Finally, even when IS control professionals did choose to blow the whistle, they were frequently ignored by senior management.

### Unwillingness to blow the whistle

Many individuals told us that it was difficult (even for an auditor) to blow the whistle. The following remarks from two different auditors were typical:

*[Blowing the whistle would] probably be career suicide to be honest . . . me as a little staff auditor, I'm going to go to the Executive VP of the company and tell him that this is a worthless project and he should pull the plug on it? I sure wouldn't want to march into this guy's office and tell him the project that he had been championing for all these years was, should be put to death (Case #44)*

*It would have been political suicide to go and to speak up for those of us that had bills to pay and all of that other good stuff--you do what you're asked to do. And, I wasn't asked to, I had some pretty candid conversations with the man that I worked for, and told him, I said that there are so many things here that are going wrong, how can we continue to do this? Because we have to do it, that's our job. And, maybe if I had had the support of my manager, I would have felt more comfortable going to the next level to tell him. But, I wasn't going to go in there by myself . . . I've been the whistle blower once in my life, and wound up standing on the unemployment line and I decided with a house and a family there was no way I was going to put myself in that position (Case #14)*

When asked what the obstacles were in blowing the whistle, many auditors pointed to structural problems within the organization that inhibit internal auditors from transmitting bad news. The following remarks from two different auditors were typical:

*You're not independent enough [as an internal auditor], I mean, you're never independent because you're in the same organization . . . there has to be some separation. If you report to the guy who's running the project, there's a problem with the structure and that's why a lot of people probably wouldn't say anything (Case #1001)*

*I think it's too risky, the general auditor or the person heading up the audit department, he's not going to jeopardize his career or his job by saying this project's stupid, we should stop it right now, unless he is the best friend of the CEO (Case #142)*

Despite the difficulties and risks involved, some IS auditors clearly perceived an obligation to blow the whistle on troubled projects:

*As an auditor, it's my job, I feel, to blow the whistle when the whistle needs to be blown. So, I don't usually hesitate to do that . . .that's just my job, I do that all the time (Case #200).*

This attitude may explain why whistle blowing did occur in a significant number of cases. One example of whistle blowing involved an IS audit manager who took the case to the company's board of directors, which ultimately cancelled the project:

*I went to the audit director and I said "we have to stop this, it can crash our core business processes." So, we made some calls and we stopped the project. I fretted over it pretty much before I did anything. I thought I could quit, I could start drinking, or all kinds of things. But, I think the support, the trust of our group of audit, from executive management, and then from my audit director [helped a lot]. (Case #182)*

In other cases that involved whistle blowing, however, it was often an external auditor or consultant that played the whistle-blowing role. In one case, for example (case #174), the project escalated out of control until problems were detected by the external auditor as part of an invited project review. Likewise, in several other cases, an external consultant was brought in to review the design of a system and ended up in a whistle-blowing role:

*We were actually asked to look at the design, but we found that it was a very difficult task to do because the project management was so shoddy that we could not. We just were not comfortable at all with anything that we were seeing. So, what we ended up doing was providing comments to the controller, and essentially to the executive management of the company, that the project management was very poor (Case #418).*

*We went right to the CIO and the CFO and had a long meeting on what the next step should be, and we always had status meetings and then we finally just escalated it to highest level and told them that we're going to have to walk out of this project unless things changed (Case #161).*

### **Some climates are much more conducive to whistle blowing than others**

The reluctance to blow the whistle or to transmit bad news may largely be due to the culture of the organization. The interview data suggest that some organizational climates are much more conducive to whistle blowing than others. IS auditors spoke of two different kinds of organizations—those with a large internal audit staff where the internal audit function is taken very seriously and those with a small audit staff where the audit function is not taken as seriously. As one IS auditor explained:

*I would say in banks and financial institutions, internal audit has a lot of clout because they have big staffs, and they have [to protect] the assets of the corporation. Historically, they have had a lot of auditors in here and they've let them review all the high risk areas, and make recommendations. In [these] industries they listen very carefully to what the auditors say.*

*One of the companies I worked for had a very small department. The company really wasn't that big and the audit department was like a joke. It was like a figurehead. It was like, oh yes, we have an internal audit department, there they are, but they would never let us get into something real serious. A couple of times I had written, what I thought were serious exposures, and they just blew it off, they said they would study the issue, they would set up a task force, but it was just a token kind of thing, they never really went after it (Case #142).*

The above comments suggest that different organizations can have fundamentally different attitudes toward the internal audit function. The IS auditors that were interviewed for this study suggested that company size and industry were contributing factors in determining the organization's attitudes concerning the internal audit function. The following remark illustrates the cultural differences that can exist across different organizations and even *within* different subunits of the same organization:

*There are different operating environments, and there are different corporate philosophies. I'm lucky that I'm in an environment where people really want me to say*

*something, that people encourage auditors to say there's a problem. Well, having said that, not in all parts of the company. This part of the company is very control conscious, they really encourage you to say there's a problem before it happens, other parts of the company just don't even want to know. They say we'll handle it, but we get involved any way. But now, this is a company that probably from a control standpoint, even though we have some people who do their own thing, is reasonably control conscious. You've got other segments of the business industry out there that do not want to know about control, never want to know about controls, and I'm talking, my particular experience in that regard was in the Brokerage industry where I had a very hard time getting people to understand why they needed to do things a certain way, why they needed to really address things on a pre-implementation basis (Case #508)*

Given the differences in culture that can exist with respect to the internal audit and control function, it is reasonable to ask "aside from possible differences due to industry and size of the organization, what are the factors that can create an effective environment for whistle blowing?" The answer, it seems, has a lot to do with the relationship that exists between the audit function and other parts of the organization including senior management. As one of our interviewees noted:

*You have to have a very secure audit department, that knows its value and is connected to senior management with a guy, that if he makes a recommendation, he feels comfortable he can do it because he's got support of senior management. Smaller companies, the audit departments don't have that support. (Case #142)*

As important as it is to have a good relationship with senior management, several auditors we spoke with underscored the importance of developing good relationships with other units within the organization. Paradoxically, the ability blow the whistle may hinge on positioning the audit function in such a way that the auditor is *not* viewed as a whistle blower, but as a team player whose job is to help keep the project on track. The following remarks made an IS auditor we interviewed illustrates this point:

*I think the way we handled it made a difference . . . we haven't acted, it sounds like a whistle blower, hey, we've told on everybody, no, we didn't do that. We suggested they really look at these issues, we've got some major problems and I think just the way we came about it as a team player instead of a policeman. And, that we want to help you, we see that this project's out of control, we can see that maybe some things that you're not getting the truth on because you're so close to it, but this is what we see, and just taking the time to explain it. And, I would say now, that relationship is great. I think the reason it's been that way here is a lot of the ground work our audit director laid and that we have sold ourselves to be part of the team and that we're, even though we are an independent appraisal organization, we are still part of the same corporate team and our goals are their goals basically. We all want the company to do well. I think that's how we sold ourselves, and yes, there will come a time, I'm sure they won't like what we say, but I think earning that respect and then the respect that, of who we do report to and I think all of that's helped a lot. (Case #182)*

In some cases, it may be possible for the audit function to help turnaround a troubled project by playing the role of a scapegoat as opposed to role of a whistle blower or policeman. As one auditor explained:

*I think a lot of it is has been just changing the mindset of what auditors were, hey, we're not a policeman we're not going to go run and scream and tell, we're going to give you an opportunity to talk with us about it and here's the problems we see and we want to help you any way we can and support you. Because sometimes, it could be say, for instance, in a project manager's deal, it could be the CIO driving them, that's their boss, and they may think, golly, this is out of control but he's given me a deadline which was the case*

*here. You've given me a deadline, I've got to meet that deadline, but then we befriended [the project manager] and said wait, we'll be the ugly people here (Case #182)*

### **Senior management's unwillingness to listen to IS audit**

Without the kind of favorable relationships and culture described earlier, overcoming the "mum effect" -- or the natural reluctance to transmit bad news -- is not the only challenge that auditors face in attempting to redirect or terminate troubled projects. Indeed, IS auditors frequently reported that senior management turned a deaf ear to their reports on troubled projects:

*We were trying to quantify and tell them, convey the seriousness of the situation. And, I don't think they believed that it would be that serious. I think a lot of that was because they were hearing different information from the head of IS and the operations guy and the project manager . . . It was very frustrating for me, a little demoralizing (Case #418).*

*In the [XYZ] system that I was telling you about, the general auditor tried to recommend in many reports that they should stop this system and kill it. But, senior management let it keep going . . . (Case #142)*

Evidently, while the passing of negative information may be a necessary condition for redirecting a troubled project, by itself it is not sufficient to bring about change. Managers and executives in positions of authority must be receptive to negative information and be willing to take corrective action. Many times they are not, and turn a deaf ear to signs of trouble. We call this the "deaf effect" and although it is not as well understood as the mum effect, we believe that it is equally important in explaining why it is sometimes so difficult to bring a troubled project under control. By remaining deaf in the presence of trouble, executives may insulate themselves from having to deal with difficult problems, or they may be unwilling to associate themselves with a failing endeavor. Sometimes the deaf effect can be overcome by going over someone's head and reporting the bad news to a higher authority as illustrated in the following interview excerpt:

*The VP of IS, who was since fired, was kind of a hear no evil, see no evil. He was really covering up for his, for the big leaks that he dealt with. And, while us lowly peons were saying, we've got a problem, we got a problem, the head guy was saying to [company] IS and to [company] executives, the CEO and all those people, there's no problem. Those of us who were working on the team, and I was like the auditor on the team, we started to issue memos to higher ups, our executives. (Case #200)*

In many cases, though, appeals to a higher authority are insufficient because the senior executives themselves exhibit the "deaf effect," as the following examples suggest:

*I wrote a lot of reports. I escalated things as much as I could but in the end, they basically said "we really appreciate your efforts, but thanks but no thanks." They took me out to lunch and said, "we really appreciate what you've done, but we really won't be needing you anymore." (Case #508).*

*I worked for [a company] and we had new system reviews, the auditor was suppose to sit in on the development and design of the system, make recommendations, raise any control issues, etc. And the bottom line was, if you thought this project was a runaway project, you were supposed to put up all kinds of flags and say wait a minute, they shouldn't do this. But, I never saw anybody do it and kill a project. I think it depends a lot on, if audit gets support of some other organizations in the company who say, yes, they're right, they should really stop this, then senior management might listen. But audit on it's own doesn't really, I can't see it. I never say just stop [the project] dead in it's tracks and say, OK, wrap it up and let's cut our losses and just start something different*

*or try a different approach to this thing. I never saw a computer system stopped dead in its track because internal audit issued a report (Case #142).*

In some circumstances, a project can become so institutionalized that special effort must be taken to persuade key executives to let go. To illustrate this, we turn for a moment to the Taurus project, which involved automation of the settlement process for the London stock exchange. Although this project was not included in the present study, it provides a good example of how difficult it can be to overcome the "deaf effect." Drummond (1996, p.151) documents the difficulty that the chief executive of the London stock exchange had in convincing other key decision makers of the need to scrap the project:

*These were big men . . . [yet] the plain fact of the matter is that they were terrified. 'What do you mean we might have to stop this? How can you say that now? . . . They didn't believe it . . . They wanted to believe I was wrong. They were fighting to find some reason to carry on.*

Based on her analysis of the project, Drummond (1996) suggests that even the transmittal of unambiguously negative information may fail to bring about change because key decision-makers often cling stubbornly to an existing myth concerning why it is critical to build the system (or complete the project). Thus, the would-be whistle blower must wield sufficient power to challenge the existing myth. Unless or until that myth is replaced with a new myth, says Drummond, there can be no significant change in the management of the project. Once again, this suggests that overcoming the mum effect is a necessary, but not sufficient condition, to produce de-escalation. Instead, it is often necessary to overcome both the mum effect and the deaf effect to bring about de-escalation.

## **A Framework for Understanding Whistle Blowing Behavior**

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