



LOUVAIN

School of Management
RESEARCH INSTITUTE

WORKING PAPER

2016/11

What happens when internal
auditors experience that
managers turn a deaf ear in
information system projects?

Gerrit Sarens,
Louvain School of Management Research
Institute

Arno Nuijten,
Erasmus University Rotterdam

The papers in the WP series have undergone only limited review and may be updated, corrected or withdrawn without changing numbering. Please contact the corresponding author directly for any comments or questions regarding the paper.
President-ils@uclouvain.be, ILSM, UCL, 1 Place des Doyens, B-1348 Louvain-la-Neuve, BELGIUM
www.uclouvain.be/ils and www.uclouvain.be/lsm_WP

Louvain School of Management Research Institute

Working Paper Series

Editor: Prof. Frank Janssen
(president-ilsm@uclouvain.be)

What happens when internal auditors experience that managers turn a deaf ear in information system projects?

Gerrit Sarens, Louvain School of Management Research Institute
Arno Nuijten, Erasmus University Rotterdam

Summary

This paper studies the deaf effect of managers on internal auditors' risk warnings that continuing a project is no longer viable. It examines: (1) the symptoms of the deaf effect in escalating information system (IS) projects as reported by the internal auditors, and (2) how the internal auditors saw their relationship to management evolve when such deaf effect occurred. The findings are based on a multi-case study approach and contribute to the literature on both escalating IS projects and internal audit effectiveness. First, we cluster the symptoms of the deaf effect for managers who (1) don't hear, (2) ignore, or (3) overrule a report of bad news and continue a failing course of action. Deaf effect symptoms could serve as an early warning on project escalation. Second, we illustrate four scenarios on how the relationship between the internal auditor and the manager developed in deaf effect situations as reported by internal auditors. We identify two scenarios in which the relationship between internal auditors and managers showed robust and two scenarios in which the relationship started drifting. Our study illustrates the importance that internal auditors have clear and outspoken expectations about their relationship to management. Several studies show that internal auditors and management still struggle to build effective relationships. Our application of the deaf effect concept provides insights into these relational problems and thus could help internal auditors improve their effectiveness.

Keywords : deaf effect; project escalation; risk management; internal audit; effectiveness; relationship building.

Corresponding author :

Prof. Gerrit Sarens
Center for Excellence CESAM
Louvain School of Management Research Institute / Campus Louvain-la-Neuve
Université catholique de Louvain
Place des Doyens 1
B-1348 Louvain-la-Neuve, BELGIUM
Email : gerrit.sarens@uclouvain.be

The papers in the WP series have undergone only limited review and may be updated, corrected or withdrawn without changing numbering. Please contact the corresponding author directly for any comments or questions regarding the paper.
President-ilsm@uclouvain.be, ILSM, UCL, 1 Place des Doyens, B-1348 Louvain-la-Neuve, BELGIUM
www.uclouvain.be/ilsm and www.uclouvain.be/lsn_WP

WHAT HAPPENS WHEN INTERNAL AUDITORS EXPERIENCE THAT MANAGERS TURN A DEAF EAR IN INFORMATION SYSTEM PROJECTS?

INTRODUCTION

This paper studies the deaf effect of managers on internal auditors' risk warnings that continuing a project is no longer viable. It examines: (1) the symptoms of the deaf effect in escalating information system (IS) projects as reported by the internal auditors, and (2) how the internal auditors saw their relationship to management evolve when such deaf effect occurred.

This study has two major motivations and thus two contributions. First, studies have shown that escalating IS projects can negatively affect an organisation's performance (Keil, 1995, Keil and Mann, 1997, Keil and Flatto, 1999, Montealegre and Keil, 2000, Guah, 2008). The escalation of IS projects refers to troubled projects that seem to *'take on a life of their own'* and continue to absorb valuable resources without ever reaching their objectives (Keil *et al.*, 2000). Korzaan and Morris (2009) defined project escalation as *'the process where resources continue to be devoted to a project despite negative information indicating that the project is in trouble'*. As is the case in many IS projects, independent assessments in the form of audits take place in order to provide decision makers with objective information on risks and provide timely warnings if redirection of the project is needed and continuation is no longer viable. Even in the presence of such information from an independent and credible source, executives may either consciously or unconsciously ignore, reject or not hear such warnings, despite the boldness of their transmission. Keil and Robey (2001) believed that studying the presence of a messenger could offer a relatively unexplored view of the escalation of IS projects, referring to project executives' refusal to hear bad news. Therefore, this paper's first contribution stems from providing a clearer understanding of managers' deaf effect on risk warnings during IS projects that exhibit project escalation. This understanding may help organisations avoid assigning valuable resources to the wrong projects for too long.

Second, this paper contributes to research on internal audit, as the internal audit function (IAF) is typically in a position to perform objective assessments and report information on risks and project continuation as a credible source. Internal auditors sometimes observe that their warnings are ignored by managers and then struggle to decide which position they should take in their relationship to managers when such deaf effects occur (Keil and Robey, 2001). By considering the deaf effect on risk warnings during a so-called 'moment of truth' as an indicator of the effectiveness of the IAF, this paper addresses an important topic (Lenz and Sarens, 2012) that has remained relatively unexplored (Sarens, 2009). Relationships between internal auditors and their main stakeholders (e.g., senior management)—particularly their behavioural aspects—have received little research attention in the academic literature (Ramamoorti, 2008). Nevertheless, several empirical studies have shown that internal auditors and managers struggle to build effective relationships, even in the presence of favourable functional aspects (E&Y, 2006, KPMG, 2009, Bolger, 2011, Lenz and Sarens, 2012, PwC, 2012). The latest Common Body of Knowledge

report (IIA, 2010) highlighted how critical a healthy and robust relationship among managers and internal auditors is to the IAF's effectiveness (Bolger, 2011, Abdolmohammadi *et al.*, 2013). In addition, the Global President of the IIA, Richard Chambers, recently claimed that one of the 10 challenges for internal auditors is to 'demonstrate relationship acumen'. However, existing studies have provided no insights into these relational problems. This paper discusses the deaf effect and project escalation to address these relational problems, and it illustrates why internal auditors do not (always) play the monitoring role they are supposed to play (Sarens and Abdolmohammadi, 2011), thus helping internal auditors to improve their effectiveness.

This paper uses data from 11 cases that represent individual deaf effect situations to complement the existing literature on project escalation, which is dominated by experiments and single-case studies. This study focuses on internal auditors who experienced the deaf effect during specific IS projects; thus, this unit of analysis refers to individual deaf effect situations.

The rest of this paper is structured as follows. Section 2 provides the necessary theoretical background for the two research questions of this paper. Section 3 discusses the methodology. Section 4 outlines the paper's empirical findings. Section 5 ends with a discussion and conclusion.

1. THEORETICAL BACKGROUND

Project escalation

According to industry surveys, 19 per cent of IS projects fail outright and 46 per cent have cost or time overruns or do not meet the customer's needs (Rubenstein, 2007). Walker and Oliver (2005, p. 67) provided Australian examples of IS projects which had a serious impact on the operating capability, reputation or financial viability of a telco firm, Australia's four largest banks and the Commonwealth government of Australia. In a follow up article they suggest that IS projects may be so critical to the success of a business that arrangements for oversighting these projects are a critical element of corporate governance (Oliver and Walker, 2006, p. 44) and they propose that IS projects should be subject to enhanced reporting to senior management (Oliver and Walker, 2006, p. 49-50).

The escalation of IS projects refers to troubled projects that seem to '*take on a life of their own*' and continue to absorb valuable resources without ever reaching their objectives (Keil *et al.*, 2000). Korzaan and Morris (2009) defined project escalation as '*the process where resources continue to be devoted to a project despite negative information indicating that the project is in trouble*'.

To bring structure to project escalation research, Ross and Staw (1986) introduced a typology of the factors influencing the escalation of projects, with each clustered according to their original research discipline. This section presents an overview of the factors that have been identified in the literature as influencing the escalation of projects. This overview is only provided for the sake of this literature review. A study of the influence of these factors is outside the scope of this paper.

A project's factors comprise its objective features and how it is perceived by management. Several project-related factors can influence project escalation, including the costs and benefits associated with the project and its expected difficulty and duration. Projects are more prone to escalation when they involve a large potential pay-off, when they are viewed as requiring a long-term investment to produce any substantial gain, and when setbacks are perceived as merely temporary problems (Keil, 1995). Based on a survey of IS auditors, Keil and Mann (1997) associated project escalation with inadequate project control mechanisms, unclear scope, unclear time and resources, changing requirements, and – confirming the findings made by (Oliver and Walker, 2006) – a lack of project monitoring by project executives. The phenomenon of project escalation particularly applies to IS projects given their large investments, the invisible nature of the software and milestones involved, the volatility of their requirements, and the intangibility of their benefits—all of which create ambiguity and may cause unusually high susceptibility to escalation (Keil and Flatto, 1999), the sunk cost effect¹ and the completion effect.²

¹ The so-called 'sunk cost effect' (Arkes and Blumer, 1985) refers to the tendency to continue risk-seeking behaviour, since attention is drawn to the losses of a decision. This effect is caused by information-processing biases and risk-taking preferences given the gain/loss framing of investment decisions, and it is based on prospect theory (Kahneman and Tversky, 1979). Various ways of framing that make decision makers attentive to the loss perspective of a decision to continue or redirect a project (Levin *et al.*, 1998, Wong *et al.*, 2008, Fagley *et al.*, 2010) could explain the tendency to make risk-seeking decisions, consistent with prospect theory. These information-processing biases are expressed in the notion that 'we invested too much to quit'.

Unsurprisingly, a large number of case studies use IS projects as examples of project escalation (Drummond, 1999, Montealegre and Keil, 2000, Pan *et al.*, 2006, Guah, 2008, Mähring and Keil, 2008).

Organisational factors comprise the characteristics that influence decision making and that could allow or promote project escalation. First, an organisation may have a particular organisational culture (Hofstede *et al.*, 2010) that could promote escalation through organisational silence (Park and Keil, 2009), a retaliation culture (Keil *et al.*, 2004) or shirking (Keil *et al.*, 2004, Mahaney and Lederer, 2010). An organisation with multiple projects and business units but scarce resources may promote competitive arousal (Ku *et al.*, 2005), leading to escalation. When competitive arousal occurs, attention is restricted and, while striving to win, people are more willing to take risks (Mano, 1994). Time pressure, social facilitation and rivalry can increase competitive arousal (Ku *et al.*, 2005). Unclear organisational structures and values can also lead to escalation. Signs of problems in a project may be missed when the division of responsibilities is unclear, as managers assume that others are attending to those signals. Signs may also be missed amid struggles over who should respond to them and how (Wissema, 2002). Unclear policies and standards may impede decision guidance (Boonthanom, 2003), which can prevent or attenuate escalation behaviour. Continuing to assign additional resources to projects is possible only as long as the organisation has slack resources to allocate to them, as reported by Keil (1995).

This section provided an overview of the situational factors that can influence project escalation. One of the relatively unexplored settings in which escalation can occur is referred to as the deaf effect.

Deaf effect

The deaf effect refers to specific settings in which project escalation could occur, namely settings where an independent messenger provides decision makers with objective information on risks and timely warnings that redirection of the project is needed and continuation is no longer viable. The presence of a messenger who provides a so-called bad news message that results in a deaf effect offers additional perspectives to the project escalation literature that have not previously been studied (Keil and Robey, 2001). More specifically, this offers research opportunities related to the messenger's characteristics and the messenger-recipient relationship.

Cuellar (2009) defined the deaf effect phenomenon as occurring '*when a decision maker doesn't hear, ignores or overrules a report of bad news to continue a failing course of action*'. Only a handful of studies have explored the deaf effect in executives. Based on a laboratory experiment with student subjects, Cuellar *et al.* (2006) found that the perceived credibility of the bad news messenger (BNM; i.e., internal auditor) and the decision maker's gender, age and experience influenced the deaf effect (Cuellar *et al.*, 2006). The credibility of the experimental source comprised

² The idea that 'we are too close to quit' is reflected in the completion effect, sometimes referred to as the '90 per cent syndrome'. When people perceive that a project is nearing completion, the goal of completing the project overrides economic considerations and even accountability (Conlon and Garland, 1993). From a comparative study across managers and students, Chang and Ho (2004) report that senior managers specifically exhibit a strong tendency to continue projects and to disregard unfavourable information when the project is nearing completion.

two dimensions: expertise and the extent to which the messenger could be relied upon to make true assertions, operationalised as labelling the internal auditor as one who tends to ‘cry wolf’ (Cuellar *et al.*, 2006).

In a second study, Lee *et al.* (2014) partially confirmed that the deaf effect is influenced by the role prescription of the BNM (i.e., whether the messenger’s role included reporting to executives on the project). Further, Lee *et al.* (2014) found that male and female decision makers differed in risk perception after receiving the auditor’s bad news message. In a third study, the expected influence of cultural dimensions and in-group collectivism was partially confirmed in an experiment that was replicated in the United States (US), Germany and China (Cuellar, 2009). Following a multiple-case study, Cuellar (2009) suggested that the decision maker’s optimism and illusion of control (Staw *et al.*, 1997) may be determinants of the deaf effect. It could be hypothesised that IS project executives’ perceptions that they have substantial skills and abilities and can exert control over a project’s outcome might cause them to perceive reports of bad news as less relevant and thus ignore them. Finally, Cuellar (2009) suggested that a highly politicised environment may also be a determinant of the deaf effect.

This study assumes that risk warnings are sent to project executives by well-informed and objective messengers. Moreover, (1) the unit of analysis is the individual situation in which an internal auditor encounters a deaf effect response in an escalating IS project. (2) The BNM is an internal auditor who meets the professional standards of the IIA (2004), which embodies the criterion of a BNM who is credible—who has the necessary expertise and can be relied upon to make true assertions (Cuellar *et al.*, 2006)—and ensures that the internal auditor operates from an IAF independent of management authority (Keil and Robey, 2001). (3) Finally, the focus is on the deaf effect (i.e., continuing a course of action despite a warning) and how it may influence whether the internal auditor (messenger) is seen as a collaborative partner or an opponent. This leads to the first research question:

RQ1: What are the symptoms of the deaf effect in the field of escalating IS projects as reported by internal auditors (BNMs)?

Internal auditors and managers

Using interviews with internal auditors, Keil and Robey (2001) described the deaf effect as a failure to respond to warnings of impending IS project failure. The auditors recalled reporting bad news about projects and having their concerns ignored by managers. Several auditors underscored the importance of developing relationships with managers. Keil and Robey (2001) concluded that effective whistle-blowing may depend on organisational factors such as organisational size, managers’ past commitment to the IAF and the IAF’s independence from management authority. They suggested that the effectiveness of whistle-blowing could be influenced by the presentation of the message. They also suggested that whether the project executive sees the BNM as a collaborative partner or an opponent (‘police officer’) makes a difference. Their study further suggested that project executives’ relationship with BNMs might be subject to change as a result of events and positions taken in the interaction. This paper elaborates on that argument by studying how the relationship between the internal auditor—acting as the provider of a risk warning—and the project executive (manager) develops in a deaf effect situation.

From this relationship perspective, this study will briefly discuss the relationship between internal auditors and managers. Internal auditors have an important position in their organisation's corporate governance framework (Paape, 2007). They are one of their firm's monitoring instruments, serving their organisation's interests within an agency-based (or control-based) corporate governance framework (Sarens and Abdolmohammadi, 2011). Until the late 1990s, agency theory underpinned their relationship with managers and determined their role as inspectors (or 'police officers').

Since 1999, the internal audit profession has been extending the role of internal auditors to include both agency-based (monitoring) and stewardship-based (collaboration) aspects after having been restricted to monitoring, inspection and assurance (Bou-Raad, 2000). The IIA (2012) currently defines 'internal auditing' as:

an independent objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of the risk management, control and governance processes.

Early work by (Chambers *et al.*, 1988) indicated that the 'police officer versus collaborative partner' relationship can influence the effectiveness of communication with managers; this was later confirmed by Sarens and Beelde (2006). These findings suggest that an agency's relationship to managers can reduce the effectiveness of internal auditors' communication. As suggested by Davis *et al.* (1997), the effectiveness of these relationships may depend on the psychological conditions of the decision makers. Thus, the relationship between internal auditors and managers and managers' psychological condition (i.e., heuristics) may influence managers' deaf effect on internal auditors' warnings about escalating IS projects. Further, Keil and Robey (2001) suggested that the relationship between the BNM (i.e., internal auditors) and managers might be subject to change as a result of events and positions taken in the interaction. This leads to the second research question:

RQ2: How did the internal auditors see their relationship to management evolve when the deaf effect occurred?

2. METHODOLOGY

Research design and data collection

Given that the deaf effect phenomenon is still in the early stages of investigation (Cuellar *et al.*, 2006, Cuellar, 2009) this study has adopted an exploratory multi-case study approach (Yin, 2009). Case studies are especially useful in exploratory research that is designed to illustrate and explain a phenomenon (Benbasat *et al.*, 1987, Yin, 2009). A multi-case design allows researchers to illuminate messenger–receiver relationships across multiple deaf effect situations. Following Keating’s (1995) framework, the case studies in this research aim to illustrate theoretical concepts.

Following Keil and Robey (2001), this study adopted the individual deaf effect situation as its unit of analysis. Also consistent with Keil and Robey (2001), this study used internal auditors as the source of information. Internal auditors were relatively accessible compared to project executives, particularly because the authors have quite a large network within the internal audit community. Moreover, given their position in the organisation and the fact that they have no operational responsibilities for the IS project they are reviewing, internal auditors have a more objective view of the situation than project executives (Keil *et al.*, 2003). The internal auditors were free to select a deaf effect situation they could easily recall and in which they were involved as the messenger. To ensure precision in the expression and measurement of respondents’ descriptions of events, actions and effects, the interviews were conducted in Dutch—the native language of both the respondents and the researchers. Open questions were used to allow the respondents to introduce any details about actions and events that could offer insights into how the messenger–receiver relationship developed in the deaf effect cases.

The study used a case study protocol to standardise the procedures, introduction, research questions and definitions across the interviews. The case study protocol was peer-reviewed by one of the authors of Keil and Robey (2001). For consistency, the definitions used in this study were recalled during the interviews. Respondents were also asked to explain apparent inconsistencies in their story. Further, the internal auditors’ anecdotal descriptions of the actions and their effects on the messenger–receiver relationship were summarised throughout the interviews. Finally, the protocol addressed confidentiality as required by the internal auditors participating in the study.

Participants

All participants were selected through information-oriented sampling among senior internal auditors in the Netherlands³ who confirmed that they had experienced

³ The way internal audit operates in the Dutch context is strongly influenced by the international standards of the IIA and shows some similarities with Anglo-Saxon countries when it comes to activities, methodology and staff profiles. This is confirmed by previous studies on internal audits in the Netherlands (Paape *et al.*, 2003, Paape, 2007, Speklé, 2007). The type of organisations that were involved in this study (railroad, banking and the public sector) is not unique to the Dutch setting. For

a deaf response during an IS project escalation. All participants represented organisations typically prone to IS project escalation, consistent with prior case studies in financial services (Drummond, 1999, Pan and Parkes, 2006, Drummond, 2008, Mähring and Keil, 2008), transportation services (Montealegre and Keil, 2000, Mähring *et al.*, 2004) and public services (Guah, 2008, Mähring *et al.*, 2008). All respondents met the criterion that required them to report to IS project executives from a position independent of management authority. Hierarchical relationships would have confounded the messenger–receiver relationships and could have influenced the deaf effect in this study, as shown in prior research (Keil and Robey, 2001). By selecting respondents who adhered to professional standards, we mitigated the possibility that the analysis of the messenger–receiver relationship would be confounded by the damaged credibility of the messenger, as suggested in prior research (Cuellar *et al.*, 2006).

Table 1 anonymously presents the background of the cases in this study,⁴ including: (1) the case numbers used later in this paper, (2) a description of the messenger, (3) the type of organisation, (4) the type of project, (5) a description of the manager (receiver) and (6) the final resolution after the deaf effect.

Table 1: Description of the Cases

Case no.	Description of the bad news messenger (BNM)	Type of project and organisational context	Description of the manager	Final resolution after the deaf effect occurred
1	Director IT control, >15 years experience, age 40–45, male, Dutch	Transfer of two business-critical IT operation centres to one new location in large company U in financial services.	Director of IT operations was recently recruited from a respected IT consulting firm where he had an impressive track record. He had become responsible for troubled IT operations, and all attention was focused on fighting fires instead of the project.	The IT director was finally replaced and the project was halted. The BNM and manager ended as opponents.
2	Director Internal Audit, >25 years experience, age 55–60, male, Dutch	Large IT project on risk-monitoring requirements of a large company W in financial services.	A C-level financial executive was recently recruited who had an impressive track record on this topic at his former organisation. He expected to find a level of maturity in the organisation that he was used to.	Replacement of responsible managers, followed by restructuring of the project organisation and project approach. The relationship between the BNM and the C-level executive was not harmed and was considered more collaborative than before.
3	Senior manager IT portfolio control, >25 years experience, age 50–55,	Implementation of a new IT connectivity platform for business-critical	The senior IT manager who was responsible for IT operations and infrastructure	The project was finally redirected after a second opinion that confirmed the

these two reasons, there are no major factors that could obviously restrict the generalisability of this study.

⁴ The internal auditors had deliberately chosen those individual cases as representing the deaf effect. The cases in this study do not represent other hypothetical situations in which: (1) the internal auditor did not take any action, (2) the internal auditor turned out to be not properly informed, and (3) the project turned out to be successful after ignoring the redirection requested by the internal auditor. Given that the focus of this study is on how the internal auditors perceived the symptoms of the deaf effect, how they reacted and how the relation with management developed in the resolution of the deaf effect, this study will not discuss other hypothetical situations.

	male, Dutch	applications at company U in financial services.	had recently been recruited on an interim basis and was not familiar with organisational procedures and working methods.	issues that were raised by the BNM. The relationship between the BNM and the manager was considered more collaborative after the deaf effect was resolved.
4	Senior IT audit manager/controller, >20 years experience, age 40–45	Implementation of a new insurance processing system at company V in financial services.	Executive business manager with impressive track record in business but not familiar with large IT projects.	After the critical signals had been ignored for a long time, the project was finally redirected. A small team that consisted of executive staff from audit, business and IT prepared a plan to redirect the project without loss of face for any of the involved executives. No relationships were harmed as a result.
5	Director Internal Audit, >25 years experience, age 55–60	Implementation of a new customer information system at company Z in financial services.	Responsibilities at the business executive level regarding the system were not clearly defined and resulted in a lack of executive commitment. One of the business executives appointed a program director with an impressive track record who received full implementation responsibility for this prestigious project. Having a large project was part of his prestige as an executive.	The C-level executives finally decided to cut the project budget, so the project stopped. The executive who had assigned the project to the program director could no longer justify continuation given the lack of arguments other than his confidence based on this program director's track record. Finally, he partnered with the auditors and others in criticising the project and allowed the C-level executives to pull the plug.
6	Senior IT audit manager, >25 years experience, age 55–60	IT project for the redesign of payment processes within company X in financial services.	Project was dominated by IT people and the redesign of IT processes and systems. A Senior Product Manager from business was appointed project executive and chaired the steering committee meetings. He was not actively involved and left project-related activities in the hands of an experienced IT project manager.	The IT project manager was replaced and the project was restructured. This intervention was not done by the project executive, but by the executive director of payments. The BNM was finally considered more of a collaborative partner by the project executive and the executive director.
7	Senior Auditor, >10 years experience, age 40–45, male, Dutch	Capacity Management System of Public Transportation Services company P.	A prestigious senior business manager had the position of process executive. For the overall performance of the system, he largely depended on services from two other departments that did not fall within his supervision or his responsibility. He aimed to use the audit as an instrument to achieve better performance from his suppliers.	Only after the audit findings were formally reported and discussed at the executive level were appropriate actions taken by the project executive.
8	Chief Audit Executive, >20 years experience, age 40–45, male, Dutch	Implementation of a new access point in a public transportation network company P.	The executive project director was motivated to exhibit his project skills at the 'champions league' level on complex and highly political projects. He was convinced that project	After intervention by the Chief Audit Executive, it was agreed that generic project management standards on risk management and regulations would be improved and

			methods were only of limited value in these conditions. He was very close to his retirement age.	applied to all projects. However, to date, no follow-up given.
9	Head IT Audit, >20 years experience, age 50–55, male, Dutch	Implementation of changes in the key management system for payment processing in company T in the financial services.	The project executive was a senior business manager who was focused on delivering on time according to agreements. He had hired a senior IT project manager who had her incentives coupled to timely delivery.	Eventually, the internal audit staff decided not to pull the plug, but instead to play an active role in tightly monitoring operational risks during implementation. After implementation, they returned monitoring responsibility to the organisation.
10	Head IT Audit, >15 years experience, age 40–45, male, Dutch	Complete redesign of an insurance portfolio management system and processes within a full subsidiary of company T in financial services.	Highly experienced executive director in this full subsidiary acted as the project executive. Unsuccessful redesign would result in the closure of the subsidiary's business activities and the portfolio offered to other parties in the market.	The project was halted by head office at the C level, which was informed of the audit concerns according to regular procedures. The subsidiary's business activities were discontinued and the executive retired early.
11	Senior audit manager, >20 years experience, age 45–50, male, Dutch	Implementation of integrated risk governance processes and systems after a merger of business activities at company Y in financial services.	The company's business executive of transaction processing was appointed project executive. He had more interest in marketing and sales than risk governance. He had hired a senior IT project manager who had her financial incentives very tightly coupled with delivering according to schedule.	The audit concerns were reported at the C level. As a consequence: (1) the project manager was replaced, (2) the project was restructured and (3) the executive director was replaced and retired early.

Data analysis

The interviews were transcribed into 6–10 pages of text (verbatim) per interview. A two-cycle coding and analytic memo-writing procedure was followed according to Saldana (2009) guidelines for qualitative research. The first coding cycle identified any text fragments that indicated the deaf effect and labelled any actions and events that appeared to be associated with the partner–opponent relationship between the messenger and the manager. The second coding cycle clustered the actions and events for two major attributes of the relationship—either of which could be associated with pushing the relationship in the direction of being partners or opponents. After the text clustering, an analytic overview was prepared of the insights that the data contributed to the literature on the deaf effect, project escalation and the relationship between the IAF and management. No new perspectives emerged; thus, the theoretical saturation of the data was reached (Charmaz, 2006).

The case study database was stored and maintained using NVivo release 9. The data included: (1) the original taped interviews, (2) the transcribed word documents, (3) the list of codes, (4) marked coding within the documents, (5) word tables with key characteristics and (6) multiple versions of the analytic memo.

3. RESULTS

Symptoms of the deaf effect

This section discusses the results relevant to the first research question: *What are the symptoms of the deaf effect in the field of escalating IS projects as reported by internal auditors (BNMs)?* BNMs reported symptoms of the deaf effect in the typical behaviour exhibited by managers after the internal auditor reported that continuing the project was no longer justified and that it should be stopped or redirected. Following the definition of the deaf effect (Cuellar, 2009), these symptoms were clustered into managers who: (1) do not hear, (2) ignore or (3) overrule a report of bad news to continue a failing course of action.

The first cluster of deaf symptoms refers to situations in which managers do not hear a relevant message because it did not capture their attention. Management's attention might have been captured entirely by their busy schedule, important management issues and finishing the project, as if they were reading a book without paying attention to the environment. In these situations, the managers paid no attention to the BNM and provided no opportunity to report or explain the message. In several cases (2, 4, 6, 7, 11 and 12), for example, the internal auditors failed to obtain any opportunity to present or discuss their concerns, as illustrated by the manager's response in case 11:

He [the manager] said to me: 'Don't bother me. I didn't receive any further signals that there might be problems in our project. So, if you have problems then talk to the project team, not to me'. These were very short meetings of no more than 10 minutes.

The respondent in case 1 described more specific symptoms:

I didn't get answers anymore. Meetings were cancelled. The most typical was that he [the manager] didn't answer my phone calls. So I asked my colleague to call him, and in two seconds he was on the phone. Yes and then you know they don't want to hear your message.

The internal auditor in case 3 detected a symptom of the deaf effect when the project executive did not assign any time to meet the BNM:

This new manager was very busy and did not assign any attention to this project, since he relied on the project manager that was involved. For that reason, he assigned his attention to other projects instead.

In all of these cases, the managers claimed to be very busy and directed all of their attention to other management issues instead of listening to the auditor. For example, the manager in case 1 was relatively new in his position as IT Operations Director, and he was busy proving himself by fighting fires. The respondent in case 1 continued, *'The manager threw up walls around himself, so no one would have access to disturb him'*. In these conditions, the BNMs had no access to management, so their messages went unheeded.

In the second cluster of reported deaf symptoms, the internal auditors reported that managers paid attention to their warning but did not consider it important for various reasons. The auditors had the opportunity to present their message to management but felt that it was ignored and not taken seriously. For example, the BNM in case 3 arranged a meeting with the responsible mid-level manager and found

out that *'the manager had not prepared our meeting and had not read my note...and he asked me why I was bothering him with my details'*.

The internal auditor in case 10 was initially given the impression that his message was taken very seriously, but then learned much later that it was not. The internal auditor in case 10 reported that the manager thanked him gratefully for his message of concern. The auditor was told that they appreciated his contribution and that they would certainly take note of it: *'With hindsight now I realise this was just a smart way of preventing me from having influence on the direction of the project'*.

Other respondents experienced the deaf effect when the receiver disputed the credibility of the messenger; the message was thus considered irrelevant and ignorable. This is illustrated in case 1, when the manager countered the content of a bad news message by stating, *'How could you know? You have too much distance to be well informed. By whom did you receive such information? That person is not properly informed'*. The credibility of the BNM in case 7 was ridiculed when the manager talked to the Chief Audit Executive:

[He said] *'I will try to explain it to you personally, but it is very complicated. You auditors don't have the knowledge and skills to understand and judge all this'*. So the manager disputed that we auditors were sufficiently equipped to give an opinion.

By disputing the credibility and relevance of the message, the managers allowed themselves to ignore it. Thus, the internal auditors presented their message to management, but it was not taken seriously. Apparently, the managers did not consider the messages a relevant contribution to their goals and thus ignored them.

In the third cluster of deaf effect symptoms, the internal auditors reported that their message was presented and understood, but then overruled by management. In these situations, management ensured that the internal auditors' messages would be ineffective. The messages apparently violated goals that were important to management and were therefore overruled. The internal auditors reported several symptoms of the rejection of bad news messages. The internal auditor in case 2 said that *'the executive did not agree with us, which gave a lot of turbulence in the organisation. At that point, there was a deaf effect, as I interpreted, in the sense that they rejected our message'*.

In several cases, the responsible manager prevented the auditor's bad news message from being effective. For example, the internal auditor in case 6 reported that his audit note containing major concerns was not discussed in the project steering committee before it became clear that it needed updating with more recent information. The auditor had to collect new data and conduct additional interviews with project staff. In this way, the internal auditor became trapped in his own procedures and professional care, which allowed management to mute his bad news message and postpone and then eliminate its effects.

Another way of eliminating BNMs was reported in case 10, where the internal auditor was given the false impression that his work and conclusions were taken seriously:

I was invited to talk to the Risk Director, who was very kind and listened to my concerns in his prestigious office...He stressed a lot that he was very happy that I was doing this kind of audit and that he really wanted to stay informed on that. It took me a while to understand that these meetings were another way

of preventing my message from having a direct effect on the project. I was just talking to a wall.

In cases 2 and 8, the manager refused to provide any response to the auditor's report and thus prevented the auditor's concerns from obtaining formal status as part of regular procedures; as a result, they remained pending, with no hope of becoming effective. The Chief Audit Executive in case 8 reported, *'I am still waiting for his response after all this time'*.

This section clustered the symptoms of the deaf effect reported by internal auditors. The auditors identified symptoms of the deaf effect in which management built walls and prevented the auditors from getting management to pay attention to their concerns. In some cases, the auditors noticed that their message was presented to management, but it was ignored and not taken seriously. In other cases, the auditors saw the deaf effect when management overruled their message and prevented it from affecting the project.

The next section discusses the actions taken by the BNMs after they discovered that their message was unheard, ignored or overruled, and how this influenced the relationship between the internal auditor and the manager.

How did the internal auditors see their relationship to management evolve when the deaf effect occurred?

This section discusses how the internal auditors reacted on the deaf effect and how they saw their relationship to management evolve when the deaf effect occurred. Following Davis *et al.* (1997), this study identified two types of relationships that can exist. First, in a clear stewardship relationship, the internal auditor and the manager perceive common goals and easily collaborate and exchange information in order to achieve these common goals. Second, in a clear agency relationship, the internal auditor and the manager perceive conflicting goals and use information asymmetry to achieve them individually while preventing the other from doing likewise.

According to Davis *et al.* (1997), both types of relationships are robust when both parties perceive each other as partners who have a stewardship relationship or when both parties perceive each other as opponents who have an agency relationship. Davis *et al.* (1997) suggested that both parties face a prisoner's dilemma in their deliberate choice to see the relationship as either stewardship-based or agency-based and to act accordingly. The authors also indicated that relationships could change and start drifting when situational conditions occur that make one or both parties (i.e., the internal auditor or the manager) exhibit behaviour that is no longer consistent with the expectations of the other party. Inspired by Keil and Robey (2001), deaf effect situations provide interesting cases to study how the relationship changes through the actions taken by internal auditors and managers when the deaf effect occurs.

Table 2: How the Relationship between the Internal Auditor and the Manager Evolves

	Behavioural Perspective			Relational Perspective		
	Number of cases mentioned	Internal auditor showed behaviour	Manager showed behaviour	Cases in which the behaviour was associated with a shift in the relationship		
				Shift towards partners	No shift	Shift towards opponents
Go up in hierarchy	11/11	11/11	2 /11	2,4	3,5,6	1,7,8,9,10,11
Withhold opponent from (process) goal achievement	9/11	2/11	7/11		5,6,8	1,3,5,7,10,11
Use power and authority	8/11	8/11	1 /11		3,5,7	1,2,8,10,11
Use of more evidence and arguments	8/11	6/11	5/11	2,6	8,9,11	3,7,10
Switch from informal to formal communication	7/11	7/11	2 /11		6,8	1,3,7,10,11
Talk to my project manager/supplier, not to me	6/11		6/11		1,5,6	3,10,11
Switch from content to persons	6/11	2/11	5 /11	7	1	3,8,10,11
Find support of powerful or trusted others	6/11	5/11	2 /11	2	3,4,5,8,10	
Switch from formal to informal communication	6/11	5/11	2 /11	2,4,7,8,9		3
Dispute credibility of other	5/11		5/11		7,8	1,10,11
Switch from content to form (rating/colour)	5/11	5/11	2/11		7,8	1,3,10
React emotionally	5/11	2/11	3 /11	7	1,3	10,11

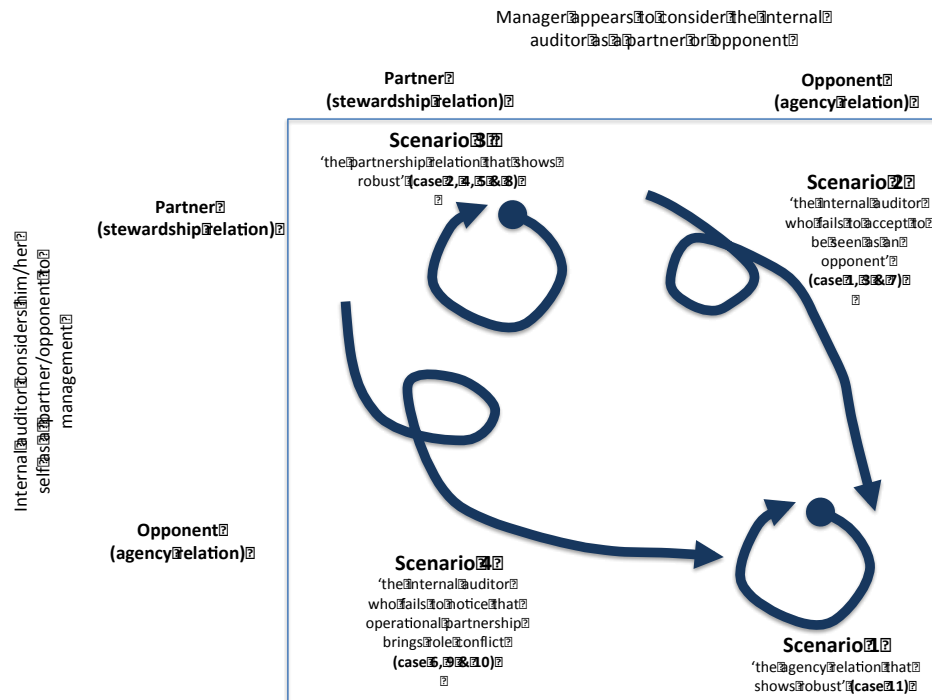
Introduce external threat	4/11	2/11	3/11	8	1,9	11
Threat opponent	2/11		2/11			4,10

Note: Numbers in the Relational Perspective refer to individual case numbers

Table 2 lists all of the actions reported in the interviews. The left-hand side of the table follows the behavioural perspective and presents the number of cases (out of 11) in which the behaviour was reported, and the number of cases in which the internal auditor and the manager respectively showed that behaviour. The right-hand side of the table follows the relational perspective. It shows the individual cases in which the specific behaviour was associated with a shift in the relationship between the internal auditor and the manager, and the direction in which it was pushed (towards partners having a stewardship relation or towards opponents having an agency relationship). The behaviour that was mentioned most often across all interviews is presented at the top of the table, and the least frequently mentioned behaviour is presented at the bottom of the table.

Based on the events and actions reported in the interviews, four scenarios were identified and illustrated that were typical of how the relationship between the internal auditor and the manager developed in the reported deaf effect situations. The four scenarios are shown in Figure 1, including which cases they were represented in. Scenarios 1 and 3 are represented by case 11 and cases 2, 4, 5 and 8 respectively. They illustrate a robust relationship between the internal auditor and the manager in deaf effect situations. Scenarios 2 and 4 are represented by cases 1, 3 and 7 and cases 6, 9 and 10 respectively. They illustrate deaf effect situations in which the relationship between the internal auditor and the manager started drifting.

Figure 1: How the Relationship Develops According to the Four Scenarios



Scenario 1

The straightforward agency relationship is shown to be robust

Case 11 represents a deaf effect situation in which the internal auditor operated straightforwardly in an inspector role ('police officer') from start to end. The respondent in case 11 reported the following:

In my former role as internal auditor in [name of former organisation], it took me a lot of effort to be heard when the organisation did not appreciate my message. Of course everyone, including me, wants to be seen as a respected partner in business. We were seen as partners, but it was frustrating to find out that our serious concerns could easily be disregarded. In my internal audit position at [current organisation name], however, life is much easier: it's clear that my assessments should receive follow-up. People know that they will have serious problems if they don't. People get easily fired here if they disregard audit opinions. So our role is clear, is understood by everybody and is supported by top management. We are respected as policemen here. This policeman role helps me a lot and turns out to be much more effective for the bottom line.

It was clear that the internal auditor in this case had a police officer role and was expected by the organisation to act according to this role. All actions reported in Table 2 for case 11 confirm that both the internal auditor and the manager considered the relationship an agency relationship and acted accordingly. The executive manager did not consider the auditor's actions to be of help, but only to be mandatory and part of the organisational procedures that ensure that projects are inspected. The internal auditor also accepted that he was seen as an inspector and did not strive to be seen as

a partner to management in the actions that he took. As these actions are interpreted in the context of an expected agency relationship, they not only confirm the agency nature of the relationship in this case, but also reinforce it. As an example of this reinforcement, the internal auditor in case 11 reported that:

The executive manager was neither interested in the project content nor interested in my audit activities related to the project. His main goal was that he didn't want nor the project or me as an auditor to cause him trouble in his conversation with regulators on the timely delivery of the risk management framework since such could harm his reputation and incentives. By ignoring the severe audit findings that I had with regard to the project, I became a threat to him. He treated me even more as an opponent and my actions were interpreted accordingly.

The deaf effect situation was finally resolved by restructuring the project after the internal auditor had reported his concerns to the C level. As a result, both the project manager and the executive director involved in this case were finally replaced. This outcome underlined the agency relationship and reinforced that the internal auditor would be seen as an opponent having a police officer role in future engagements.

This case illustrates the robustness of the straightforward agency relationship in a deaf effect situation, as indicated by Davis *et al.* (1997). For the internal auditor to be effective in a deaf effect situation, subsequent actions must remain consistent with the 'inspector' position that comes with the agency relationship, as performed by the internal auditor in this case. The internal auditor in case 11 stated that '*I understand that this approach doesn't make me popular, but at the end people know what to expect. And that makes me effective in my role*'.

Scenario 2

The internal auditor fails to notice that the manager sees the auditor as an opponent

This scenario is represented in cases 1, 3 and 7 and represents a change in how the internal auditor viewed the relationship with management in a deaf effect situation.

The internal auditor presented in the previous scenario succeeded in exhibiting subsequent actions that remained consistent with the agency relationship; however, several of the cases presented in this study showed that many internal auditors prefer to see themselves as a collaborative partner to management. They would like to be perceived as helping the organisation to achieve its goals, and they want managers to appreciate their critical comments. This view is illustrated by the Chief Audit Executive in case 8:

My people are convinced to do their best for the organisation and are really trying to help management to be successful. They also consider themselves to be helping the organisation and even expect that they will be celebrated by management for assigning unsatisfactory ratings and keeping management out of trouble. Such perception is naïve and not realistic of course. It's difficult to change such personal beliefs that people have.

His point was further illustrated by the internal auditor in case 7:

The manager told me that I was doing no good to the organisation. It shocked me that he didn't see that I was trying to help the organisation. To me it's a personal issue that I need to learn that people do not always appreciate what you do...even if it's in their own interest. To me it's difficult to deal with that. Especially with regard to people that I used to work with as a partner in the old days. I would like them to still see me as their partner.

The interviewee in case 3 explained his efforts to 'do well to the organisation' through his personal beliefs about helping the organisation to achieve high-quality service. He had rescheduled his personal priorities in order to perform a critical review of project plans as soon as they were available: *'That's because you are aware of how important your role is in order to contribute to project success. It's a personal belief that you want to do good and help'*.

In those cases, the internal auditors persisted in forcing themselves to have a stewardship relation with the managers. They found it difficult to understand and accept that the managers, who felt criticised, considered the internal auditors opponents who had opposite goals and with whom the managers would not likely share information. In those cases, the internal auditors typically persisted in taking actions from a stewardship position, such as providing more detailed evidence and arguments, assuming that this kind of help would be appreciated and make the managers change their opinion.

These auditors had difficulty accepting that the managers clearly expressed that they did not want to be bothered with details and that they did not even make an effort to be informed about the auditors' advice. Even when the managers disputed the credibility of the internal auditors, these internal auditors were likely to persist in behaving as a partner to management. In those cases, it appeared that the internal auditors failed to notice that their role and their actions were interpreted by management in a way that was opposite to what the auditors expected and had adopted as a personal belief.

These respondents illustrated their personal struggle when the discussion appeared to move from content to what they perceived as a personal offence, and their view of a partnership relation could hold no longer. In case 3, the internal auditor relayed the words of the manager:

'Hey you, what do you think you are doing...bothering me with your details?' For me, this showed the deaf effect. I had the feeling, 'Hey you yourself. Just read my concerns instead of refusing to understand'. Yes, that pushes you into the direction of policeman and you get that feeling although you didn't want to.

The switch from content to personal factors was also detected in case 7, as the BNM described:

He looked me in the eyes and said '[Name of the Senior Audit Manager], you are really not helping me and you harm our organisation'...And I said, '[name of the project executive], the way that you take your decisions shows that you don't take this problem seriously'.

The internal auditor in case 1 illustrated that he inevitably had to take action by which he would realise and accept that the manager would no longer see him as a partner:

He then saw us clearly as policemen. Of course this was related to our intervention that has...how shall I call it?...a policeman flavour. It is no joke when somebody goes to your boss and talks about what you do within your department and that things are not going well. You're not waiting for that kind of help.

When they perceived that the situation no longer provided any other options, the internal auditors in those cases overcame their reluctance to take agency-related actions and used their power and authority, went up in hierarchy or moved their message from content to formal ratings. Table 2 shows that those actions are perceived as pushing towards an agency relationship with management—an agency relation that they finally accepted for these particular cases. It is interesting to note that the internal auditors in these cases considered these managers 'exceptions to the rule', and that they remained fully motivated to be of help to management and be perceived as a partner to management in future assignments. They appeared not to accept that managers could view them as opponents.

These cases illustrate that the relationship can suddenly change towards an agency relation when situational conditions occur that make one party (i.e., management) exhibit behaviour that is no longer consistent with the expectations of the other party (i.e., internal auditors who consider themselves partners of management), as suggested by Davis *et al.* (1997).

It is interesting to note that cases 3 and 7 did not provide any unambiguous resolutions of the deaf effect situations, which could indicate a lack of internal audit effectiveness in the situation, as the internal auditors persisted in acting as partners while their actions could be interpreted by management as coming from an opponent.

Scenario 3

The strategic partnership relation is shown to be robust

In the two scenarios mentioned above, the manager and the internal auditor finally came to see each other as opponents, and the redirection of the project sometimes had disastrous personal consequences to the responsible managers, as presented in Table 1. Cases 2, 4, 5 and 8 reveal another scenario, in which the project was ultimately redirected without harming the relationship. The internal auditors in cases 2 and 5 even reported that the troubled conditions and the way the project was redirected had greatly improved the relationship between the internal auditor and management. In those cases, conditions were created that allowed full attention to be focused on common goals at the strategic and organisational levels, thereby avoiding hardened positions at the project, procedural and personal levels. These conditions were illustrated in various ways. The internal auditor in case 4 reported the following:

We arranged a meeting with a small group of directors in a trusted setting. In that meeting, we all put aside the positions that had been taken earlier and we openly discussed our concerns and content from both ends. The central question was no longer 'why this had happened?' but was focused on the common steps to make in order to serve the organisational goals. We finally found ourselves to be strategic partners and bent the project in that desired direction.

The internal auditor in case 2 illustrated how informal communication in a trusted setting greatly helped to resolve the situation in the best interests of the

organisation and without any of the parties involved losing face. He reported the following:

This situation confirmed to me that you should avoid escalation, which makes the situation evolve from bad to worse. It is important to create a trusted setting and exchange information in an informal setting. 'Informal' doesn't mean that you have dinner together informally, but it is more like walking into each other's rooms and being sure to keep on talking to each other. Furthermore, you should allow and trust others to take action. So it all depends on mutual trust, even trusting that you won't escalate.

Table 2 shows that in those cases, the importance of informal communication in a trusted setting was recognised as a means to reinforce a partnership relation. Further, Table 2 illustrates that actions are interpreted in the context of the expectations that people have. Actions that marked a switch from content to persons, actions that introduced external threats, the use of more evidence and arguments, and even the action of going up in hierarchy were interpreted in these cases as acts that confirmed the expected partnership relation, while similar actions had been interpreted differently in cases that represent the other scenarios involving agency relations.

The cases in this scenario represent actions that are pushing towards a stewardship relation in order to resolve the deaf effect situation. In some cases, a common history as partners turned out to be valuable. The internal audit directors in cases 2 and 8 reflected on the added value of a sequence of strategy sessions in which internal audit staff and management openly discussed hypothetical and factual cases of strategic risk taking. They discussed openly about trust, image, personal considerations, tolerance and organisational interests. These meetings not only improved the understanding of the organisation's risk appetite, but also resulted in a strategic partnership concerning risk taking that served as a valuable starting position in resolving the deaf effect situations described in these cases.

Scenario 4

The internal auditor experiences a role conflict after an operational partnership

Scenario 2 reported cases in which the internal auditors changed their view of their relationship with management because they could no longer ignore that management did not meet the expectations of a stewardship relation, and they finally ended up as opponents. Cases 6, 9 and 10 represent a fourth scenario, in which the internal auditor becomes aware that the presumed partnership relation with management creates conflict with the internal auditor's professional responsibilities. As a result, the internal auditor changes his or her behaviour, realising that this could be in conflict with the behaviour expressed until then, and that his or her changed behaviour would appear to be in conflict with the created expectations towards management.

In these cases, the managers initially considered the internal auditor helpful in achieving organisational goals. These internal auditors were obviously highly appreciated for their expertise in internal controls and security, and they had become highly involved in the project because they wanted it to be successful and felt

responsible for mitigating the organisation's risks. The auditor in case 9 justified his high level of personal involvement in the project as follows:

The project manager did not pay sufficient attention to the security risks that were involved in this project and which could harm the payment processes of our organisation... We could have stepped back at that moment; however, we decided to get more closely involved in the project and ensure that a minimum level of security measures would be implemented.

As in other cases where internal auditors became highly involved in the project at the operational level, this high involvement backfired when the internal auditor realised that his role required that he report project continuation and redirection issues. This unexpected change from helping the project on operational issues to blowing the whistle on the project was perceived by management as a betrayal by a former partner. As a result, the internal auditor was seen as an opponent—even an enemy—and the relationship was damaged severely on both professional and interpersonal levels. This was illustrated by case 10:

At that point, I stepped back into my formal role, and I reported that the project would not succeed in realising the original scope. I remember that the program manager called me on the phone and threatened that he would ruin my career if I persisted in reporting this message to his superiors.

Cases 9 and 10 illustrate that the relationship between internal auditors and managers can suddenly change significantly—and thus not be robust—in deaf effect situations involving a presumed partnership relation at an operational level that turns out to be in conflict with the internal auditor's responsibility. Following his responsibility, the internal auditor blows the whistle and thus acts in a way that is inconsistent with, or even violates, the expectations of management, as depicted in the actions in Table 2 for these cases. These cases illustrate that a partnership relation between the internal auditor and the manager at the operational level is not robust in situations that involve strategic decisions regarding the continuation or redirection of a project.

Cases 9 and 10 also illustrate that investing in an operational partnership with management does not help internal auditors to be effective in resolving deaf effect situations.

4. DISCUSSION

Summary of the findings

The objective of this paper was twofold: (1) obtain a better understanding of managers' deaf effect on risk warnings in the context of escalating IS projects by studying the symptoms of the deaf effect, and (2) illustrate how the internal auditors saw their relationship to management evolve when the deaf effect occurred, thereby providing insights into relational problems and contributing to the literature on IA effectiveness. The data, which were drawn from 11 deaf effect situations (case studies), provided the following conclusions.

Following the definition of deaf effect (Cuellar, 2009), the symptoms of the deaf effect were clustered into managers who: (1) do not hear, (2) ignore or (3) overrule a report of bad news to continue a failing course of action. In the first cluster ('do not hear'), managers gave no attention or time to the internal auditors (BNMs), and they provided no opportunities to present, explain or discuss their message. In all of these cases, the managers claimed to be very busy, and all of their attention was devoted to other management issues. In the second cluster ('ignore'), the internal auditors had an opportunity to present their message to management; however, they felt that their message was ignored and not taken seriously. Moreover, the credibility of the messenger or the relevance of the message was sometimes disputed, giving the manager an excuse to ignore the message. In the third cluster ('overrule'), management prevented the internal auditor's message from being effective by not discussing it at relevant meetings or by refusing to provide any management response to the auditor's report.

A study of the events and actions reported in the interviews led to the identification and illustration of four scenarios that showed how the relationship between the internal auditor and the manager could develop in the reported deaf effect situations. Two scenarios illustrated that the relationship between the internal auditor and the manager was robust in deaf effect situations. When the internal auditor and the manager appeared to have a consistent view of the auditor acting as a partner to management or as a 'police officer' to management, and when subsequent actions were taken in line with this view, then the relationship was shown to be robust in a deaf effect situation. The cases showed that both the position as a partner to management and as a police officer could provide a resolution of the deaf effect.

Two scenarios illustrated that the relationship between the internal auditor and the manager could start to drift in deaf effect situations. In both scenarios, the internal auditor discovered, with hindsight, that he or she had misinterpreted the relationship with management and had to change his or her view of this relationship and the actions that were needed for a resolution of the deaf effect situation. In one of these scenarios, the internal auditor struggled with noticing that the manager did not consider the auditor as a partner. After the internal auditor became aware of this, the mode of actions moved the relationship towards one based on agency principles. The other scenario illustrated the struggle of the internal auditors who became aware that a presumed operational partnership resulted in a role conflict. As a resolution of this conflict, the internal auditors changed their course of action towards that of an opponent and made sure that management considered them as opponents instead of partners at the resolution of the deaf effect situation.

Conclusion

The overall conclusion of this paper is that it is important for internal audit effectiveness that both internal auditors and managers have clear and outspoken expectations about their relationship. That is, internal auditors and managers (who typically act as auditees) should be transparent towards each other regarding how they view each other (as partner or opponent) and act upon this in a consistent way. The case studies showed that it is important to make this clear upfront so that the relationship is not based on illusions, as this leads to ineffective behaviour in so-called ‘moments of truth’. A robust relationship with management is clearly a condition for internal auditors to be effective.

This study also found evidence that the clear agency relationship between internal auditors (serving as ‘police officers’) and managers is sometimes effective and robust. This suggests that a collaborative partnership approach, as often suggested in the literature and by the IIA, is not always the most effective way to approach the relationship with management.

Based on this overall conclusion, the key message for internal auditors is quite straightforward. Continuously spending time and energy on relationship building with management is crucial, as building a robust relationship is an important condition to survive ‘moments of truth’. That is, internal auditors must try to find a good balance between the technical aspects of auditing (on which a lot of internal auditors tend to concentrate most of their time) and the relational aspects of their work. This is consistent with Richard Chambers’ message (see Section 1)—that internal auditors should ‘demonstrate relationship acumen’—as well as previous studies by Chambers *et al.* (1988) and Sarens and Beelde (2006).

Limitations and suggestions for future research

The most important limitation of this qualitative study is the lack of evidence on the causality between the deaf effect and the relational aspects. The authors found no evidence regarding whether the deaf effect affects the relationship or whether it is the other way around—for example, whether a poor relationship between the internal auditor and the manager resulting from past events leads to a deaf effect on the current project. Moreover, given that this study only focused on one specific deaf effect situation for each interviewee, the authors cannot conclude how the relationship evolved afterwards. Therefore, the authors strongly encourage future studies to take a longitudinal approach to see how the relationship between internal auditors and managers evolves after going through several ‘moments of truth’.

Consistent with Keil and Robey (2001), the authors’ interviews with the internal auditors were designed to draw out autobiographical memories of the events and positions taken by the internal auditors, as well as how they perceive the effects on their relationship with management in deaf effect situations. Although such memories may not always depict a ‘true’ representation of what actually happened, it is well established that they are likely to be representative of the underlying memory structure and may well influence future behaviour, as people often make decisions according to how they remember an experience rather than how it actually occurred (Conway, 1990). To reduce this potential bias, future research could triangulate

interview data with document analysis (e.g., audit reports that include management reactions).

REFERENCES

- Abdolmohammadi, A., S. Ramamoorti and G. Sarens (2013), *Cae Strategic Relationships: Building Bridges to the C-Suite*, The Institute of Internal Auditors Research Foundation, Altamonte Spring, FL.
- Arkes, H. R. and C. Blumer (1985), 'The Psychology of Sunk Costs', *Organizational Behavior and Human Decision Processes*, Vol. 35, No. 1, pp. 124-140.
- Benbasat, I., D. K. Goldstein and M. Mead (1987), 'The Case Research Strategy in Studies of Information Systems', *MIS Quarterly*, Vol. 11, pp. 369-406.
- Bolger, D. (2011), *A Call to Action: Stakeholders' Perspectives on Internal Auditing*, The Institute of Internal Auditors Research Foundation, Altamonte Spring, FL.
- Boonthanom, R. (2003), 'Information Technology Project Escalation: Effects of Decision Unit and Guidance', Paper presented at the *International Conference on Information Systems*.
- Bou-Raad, G. (2000), 'Internal Audit and a Value Added Approach: The New Business Regime', *Managerial Auditing Journal*, Vol. 15, No. 4, pp. 182-186.
- Chambers, A., G. Selim and G. Vinten (1988), *Internal Auditing*, 2nd ed., Pitman, London.
- Chang, C. J. and J. L. Y. Ho (2004), 'Judgement and Decision Making in Project Continuation: A Study of Students as Surrogates for Experienced Managers', *ABACUS*, Vol. 40, No. 1, pp. 94-116.
- Charmaz, K. (2006), *Constructing Grounded Theory - a Practical Guide through Qualitative Analysis*, Sage, Los Angeles.
- Conlon, D. E. and H. Garland (1993), 'The Role of Project Completion Information in Resource Allocation Decisions', *The Academy of Management Journal*, Vol. 36, No. 2, pp. 402-413.
- Conway, M. A. (1990), *Autobiographical Memory: An Introduction*, Open University Press, Buckingham, UK.
- Cuellar, M. J. (2009), 'An Examination of the Deaf Effect Response to Bad News Reporting in Information Systems Projects', PhD, Georgia State University.
- Cuellar, M. J., M. Keil and R. D. Johnson (2006), 'The Deaf Effect Response to Bad News Reporting in Information Systems Projects', *E - Service Journal*, Vol. 5, No. 1, pp. 75-95.
- Davis, J. H., F. D. Schoorman and L. Donaldson (1997), 'Toward a Stewardship Theory of Management', *Academy of Management Review*, Vol. 22, No. 1, pp. 20-47.
- Drummond, H. (1999), 'Are We Any Closer to the End? Escalation and the Case of Taurus', *International Journal of Project Management*, Vol. 17, No. 1, pp. 11-16.
- Drummond, H. (2008), 'The Icarus Paradox: An Analysis of a Totally Destructive System', *Journal of Information Technology*, Vol. 23, No. 3, pp. 176-184.
- E&Y (2006), *Star Oder Statist? Rolle Und Zukunft Der Internen Revision Aus Sicht Von Unternehmen Und Interessengruppen*.
- Fagley, N. S., J. G. Coleman and A. F. Simon (2010), 'Effects of Framing, Perspective Taking, and Perspective (Affective Focus) on Choice ', *Personality and Individual Differences*, Vol. 48, No. 3, pp. 264-269.
- Garland, H. (1990), 'Throwing Good Money after Bad: The Effect of Sunk Costs on the Decision to Escalate Commitment to an Ongoing Project', *Journal of Applied Psychology*, Vol. 75, No. 6, pp. 728-731.
- Guah, M. W. (2008), 'It Project Escalation: A Case Analysis within the Uk Nhs', *International Journal of Information Management*, Vol. 28, pp. 536-540.
- Hofstede, G., G. J. Hofstede and M. Minkov (2010), *Cultures and Organizations: Software of the Mind*, 3rd ed., McGraw-Hill USA, New York.

- IIA (2004), *International Standards for the Professional Practice of Internal Auditing*, The Institute of Internal Auditors, <http://www.theiia.org>.
- IIA (2010), *Common Body of Knowledge (Cbok) the Iia's Global Internal Audit Survey*, The Institute of Internal Auditors Research Foundation, Altamonte Springs, FL.
- IIA (2012), *Definition of Internal Auditing*, The Institute of Internal Auditors, <https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Definition-of-Internal-Auditing.aspx>.
- Kahneman, D. and A. Tversky (1979), 'Prospect Theory: An Analysis of Decision under Risk', *Econometrica*, Vol. 47, No. 2, pp. 263-291.
- Keating, P. (1995), 'A Framework for Classifying and Evaluating the Theoretical Contributions of Case Research in Management Accounting. ', *Journal of Management Accounting Research*, Vol. 7, pp. 66-86.
- Keil, M. (1995), 'Pulling the Plug: Software Project Management and the Problem of Project Escalation', *MIS Quarterly*, Vol. 19, No. 4, pp. 421-447.
- Keil, M. and J. Flatto (1999), 'Information Systems Project Escalation: A Reinterpretation Based on Options Theory', *Accounting, Management & Information Technology*, Vol. 9, pp. 115-139.
- Keil, M. and J. Mann (1997), 'Understanding the Nature and Extent of Is-Project Escalation: Results from a Survey of Is Audit and Control Professionals', Paper presented at the HICSS, Hawai.
- Keil, M., J. Mann and A. Rai (2000), 'Why Software Projects Escalate: An Empirical Analysis and Test of Four Theoretical Models', *MIS Quarterly*, Vol. 24, No. 4, pp. 631-664.
- Keil, M., A. Rai, J. E. C. Mann and G. P. Zhang (2003), 'Why Software Projects Escalate: The Importance of Project Management Constructs', *IEEE Transactions on Engineering Management*, Vol. 50, No. 3, pp. 251-261.
- Keil, M. and D. Robey (2001), 'Blowing the Whistle on Troubled Software Projects', *Association for Computing Machinery. Communications of the ACM*, Vol. 44, No. 4, pp. 87-94.
- Keil, M., H. J. Smith, S. Pawlowski and L. Jin (2004), "Why Didn't Somebody Tell Me?": Climate, Information Asymmetry, and Bad News About Troubled Projects', *Database for Advances in Information Systems. New York: Spring 2004.*, Vol. Vol. 35, No. Iss. 2, pp. p. 65 (20 pages).
- Korzaan, M. and S. A. Morris (2009), 'Individual Characteristics and the Intention to Continue Project Escalation', *Computers in Human Behavior*, Vol. 25, No. 6, pp. 1320-1330.
- KPMG (2009), *The Audit Committee Journey*, London.
- Ku, G., D. Malhotra and J. K. Murnighan (2005), 'Towards a Competitive Arousal Model of Decision-Making: A Study of Auction Fever in Live and Internet Auctions', *Organizational Behavior and Human Decision Processes*, Vol. 96, No. 2, pp. 89-103.
- Lee, J. S., M. J. Cuellar, M. Keil and R. Johnson (2014), 'The Role of a Bad News Reporter in Information Technology Project Escalation: A Deaf Effect Perspective', *Database for Advances in Information Systems*, Vol. 45, No. 3, pp. 8-29.
- Lenz, R. and G. Sarens (2012), 'Reflections on the Internal Auditing Profession: What Might Have Gone Wrong?', *Managerial Auditing Journal*, Vol. 27, No. 6, pp. 532-549.
- Levin, I. P., S. L. Schneider and G. J. Gaeth (1998), 'Not All Frames Are Created Equal: A Typology and Critical Analysis of Framing Effects', *Organizational Behavior and Human Decision Processes*, Vol. 76, No. 2, pp. 149-188.
- Mahaney, R. C. and A. L. Lederer (2010), 'The Role of Monitoring and Shirking in Information Systems Project Management', *International Journal of Project Management*, Vol. 28, No. 1, pp. 14.

- Mähring, M., J. Holmstrom, M. Keil and R. Montealegre (2004), 'Trojan Actor-Networks and Swift Translation: Bringing Actor-Network Theory to IT Project Escalation Studies', *Information Technology & People*, Vol. 17, pp. 210-238.
- Mähring, M. and M. Keil (2008), 'Information Technology Project Escalation: A Process Model', *Decision Sciences*, Vol. 39, No. 2, pp. 239-272.
- Mähring, M., L. Mathiassen, M. Keil and J. Pries-Heje (2008), 'Making IT Project De-Escalation Happen: An Exploration into Key Roles', *Journal of the Association for Information Systems*, Vol. 9, No. 8, pp. 462-496.
- Mano, H. (1994), 'Risk-Taking, Framing Effects, and Affect', *Organizational Behavior and Human Decision Processes*, Vol. 57, pp. 38-58.
- Montealegre, R. and M. Keil (2000), 'De-Escalating Information Technology Projects: Lessons from the Denver International Airport', *MIS Quarterly*, Vol. 24, No. 3, pp. 417-447.
- Oliver, G. R. and R. G. Walker (2006), 'Reporting on Software Development Projects to Senior Managers and the Board', *ABACUS*, Vol. 42, No. 1, pp. 43-65.
- Paape, L. (2007), 'Corporate Governance - the Impact on the Role, Position, and Scope of Services of the Internal Audit Function', PhD-thesis, Erasmus University Rotterdam, Rotterdam.
- Paape, L., J. Scheffe and P. Snoep (2003), 'The Relationship between the Internal Audit Function and Corporate Governance in the EU – a Survey', *International Journal of Auditing*, Vol. 7, No. 3, pp. 247-262.
- Pan, G. and A. Parkes (2006), 'Successfully Turning around a Failing E-Procurement Project: Lessons from a UK Borough Council', Paper presented at the 17th Australian Conference on Information Systems, Adelaide.
- Pan, S. L., G. S. C. Pan, M. Newman and D. Flynn (2006), 'Escalation and De-Escalation of Commitment to Information Systems Projects: Insights from a Project Evaluation Model', *European Journal of Operational Research*, Vol. 173, No. 3, pp. 1139-1160.
- Park, C. and M. Keil (2009), 'Organizational Silence and Whistle-Blowing on IT Projects: An Integrated Model', *Decision Sciences*, Vol. 40, No. 4, pp. 901-918.
- PwC (2012), *Aligning Internal Audit: Are You on the Right Floor? State of the Internal Profession Study*, PricewaterhouseCoopers.
- Ramamoorti, S. (2008), 'The Psychology and Sociology of Fraud: Integrating the Behavioral Sciences Component into Fraud and Forensic Accounting Curricula', *Issues in Accounting Education*, Vol. 23, No. 4, pp. 521-533.
- Ross, J. and B. M. Staw (1986), 'Expo86: An Escalation Prototype', *Administrative Science Quarterly*, Vol. 31, No. 2, pp. 274-297.
- Rubenstein, D. (2007), 'Standish Group Report: There's Less Development Chaos Today', (Ed.)^(Eds.).
- Saldana, J. (2009), *The Coding Manual for Qualitative Researchers*, Sage, Los Angeles.
- Sarens, G. (2009), 'Internal Auditing Research: Where Are We Going? Editorial', *International Journal of Auditing*, Vol. 13, pp. 1-7.
- Sarens, G. and M. J. Abdolmohammadi (2011), 'Monitoring Effects of the Internal Audit Function: Agency Theory Versus Other Explanatory Variables', *International Journal of Auditing*, Vol. 15, No. 1, pp. 1-20.
- Sarens, G. and I. D. Beelde (2006), 'The Relationship between Internal Audit and Senior Management: A Qualitative Analysis of Expectations and Perceptions', *International Journal of Auditing*, Vol. 10, pp. 219-241.
- Speklé, R. F., H. J. Elten and A.-M. Kruis (2007), 'Sourcing of Internal Auditing: An Empirical Study', *Management Accounting Research*, Vol. 18, No. 1, pp. 102-124.
- Staw, B. M., S. G. Barsade and K. W. Koput (1997), 'Escalation of the Credit Window: A Longitudinal Study of Bank Executives' Recognition and Write-Off of Problem Loans', *Journal of Applied Psychology*, Vol. 82, pp. 130-142.

- Walker, R. G. and G. R. Oliver (2005), 'Accounting for Expenditure on Software Development for Internal Use', *ABACUS*, Vol. 41, No. 1, pp. 66-91.
- Wissema, H. (2002), 'Driving through Red Lights: How Warning Signals Are Missed or Ignored', *Long Range Planning*, Vol. 2002, pp. 521-539.
- Wong, K. F. E., J. Y. Y. Kwong and C. K. Ng (2008), 'When Thinking Rationally Increases Biases: The Role of Rational Thinking Style in Escalation of Commitment', *Applied Psychology: An International Review*, Vol. 57, No. 2, pp. 246-271.
- Yin, R. K. (2009), *Case Study Research Design and Methods*, Sage Publications.