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Context and Timing in Bad News Reporting: An Exploratory study in IS projects

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ABSTRACT

Failure to report bad news at the right time has been one of the major contributors to IS project failures. While prior studies have identified many factors that can affect bad news reporting, there is a dearth of research on how context and timing affect the perception and reporting of bad news. Furthermore, little is known about how individuals perceive and process different types of bad news that can emerge during a project's lifecycle. In this study, we employ a multiple case study approach to address these important theoretical gaps that exist within the bad news reporting literature. Our aim to shed light on how context and timing affect bad news reporting in IS projects.

Keywords

Bad News reporting, Multi-case, IT Project failures, Exploratory.

INTRODUCTION

Research shows that a contributing factor in many failed IS projects is the project manager not escalating critical issues in time (Keil, Mann et al. 2000; Schmidt, Lyytinen et al. 2001) resulting in runaway projects (Keil, Mixon et al. 1994). Critical issues often involve bad news relating to the true status of a project that goes unreported (Oz 1994; Smith, Keil et al. 2001). We define bad news in the context of this research as an undesirable event or an outcome in the course of the project which can hamper the delivery of the project (Barki, Rivard et al. 2001). Bad News reporting in IS projects has been a topic of research for nearly fifteen years (Smith, Keil et al. 2001). However, most of the research on this topic involves variance studies investigating factors that affect bad news reporting (Keil, Im et al. 2007; Iacovou, Thompson et al. 2009).

There has been anecdotal evidence, that bad news is dependent on the time you present the news (Buckman 1984). Bad news reported at one point of time might not be considered "bad news" at some other point in time. Additionally, bad news of different types (e.g., misunderstanding requirements or lack of end-user cooperation) may not be reported with the same priority. Our review of the literature shows that that there have not been any studies categorizing bad news types and investigating the phenomenon of bad news reporting over time. Our attempt is to examine how this phenomenon plays out over time during the course of an IS project. Specifically our research question is:

How does the type of bad news and the project stage at which it occurs influence perceptions of the bad news and willingness to report it?

THEORETICAL BACKGROUND

Reporting bad news is always an unpleasant task and a emotionally distressing phenomenon (Folger and Skarlicki 2001). Many individuals will not be comfortable communicating bad news. Bad news reporting has mainly been researched in the medical field (Ptacek and Eberhardt 1996) (e.g. reporting bad news about illness to terminally ill patients (Fallowfield and Jenkins 2004)), in political science literature (Soroka 2006) (e.g. investigating the significance of reporting bad news) and in the management literature (Bies 2013) (e.g. reporting bad news to workers about their unsatisfactory performance (Ilgen and Davis 2000)). In medical literature the main focus of research is how to get medical professionals educated and better trained to communicate bad news to patients and/or

their families. In the political science literature, the focus has been to understand the impact of bad news reporting on public perception of the economy, which affects voting behavior (MacKuen, Erikson et al. 1992). In the management literature, the focus has been to understand the complex process of bad news delivery in an organization (Bies 2013).

In the IS literature, bad news reporting research has often been grounded in the basic whistle blowing model (Miceli and Near 1992) and has also borrowed from the "mum" effect literature (Tesser and Rosen 1975) and work in the area of organizational silence (Morrison and Milliken 2000). In IS projects, project team members fail to escalate issues and keep "mum" in a project setting, since it is often felt (Snow, Keil et al. 2007) that "Bad news gets you killed." The mum effect has been found to be a contributing factor in project failures (Tan, Smith et al. 2003). Variations of the mum effect have been labeled as distorted reporting (Snow and Keil 2002) and "selective reporting" (Iacovou, Thompson et al. 2009) which can also lead to disastrous consequences in IS projects. IS research in this area has mainly focused on finding factors that affect bad news reporting like project risk (Snow, Keil et al. 2007), information asymmetry (Keil, Smith et al. 2004), culture (Tan, Smith et al. 2003), (Keil, Im et al. 2007), executives' communication quality (Iacovou, Thompson et al. 2009), and personal factors like an individual's morality (Park, Keil et al. 2009), perception of impact and wrongdoing (Smith, Keil et al. 2001), and perception of "benefit-to-cost differential" associate with reporting (Keil, Tiwana et al. 2010). Environmental factors play a key role in bad news reporting but have not been extensively investigated for bad news reporting in IS projects (Smith, Keil et al. 2001). As also described by Iacovou et al. (2009) there is dearth of research on identifying project-level factors in the bad news reporting literature. Also missing is a categorization of bad news types. Not all bad news are the same. For example, a misunderstanding of requirements on the part of an analyst is not the same as that of lack of cooperation from end-users in requirements gathering, though both can be considered as bad news in a project setting. Further, the above two examples of bad news may not be considered to be as bad at the start of a project as compared to if they are discovered at the tail-end of the project when most of the development work has already been done. Thus, the type of bad news and the timing of the bad news in relation to the project's timeline may influence both the perception of bad news and individuals' willingness to report it. Our review of the literature on bad news reporting in IS projects shows that very little work has investigated the role of type of bad news and the element of time (Park, Im et al. 2008), which would seem to be key factors in bad news reporting. The only instance in which time is considered is a study by Park et al. (2008) that examines the effect of "time urgency" in bad news reporting. Park et al. (2008), however, does not speak to the question of how the timing of the bad news in relation to the project's timeline may affect reporting. Thus, we conclude that the type of bad news and the temporal nature of bad news reporting (i.e., under what conditions will bad news reporting be held back or accelerated at different points of time during the course of a project) has not been examined in the IS literature.

In the medical literature bad news has been connected to timing. Conveying bad news in the medical context is dependent on whether the patient is already aware or suspects his/her diagnosis or how ill the patient feels at the time when the news is reported to him/her. In other words, delivering bad news in this context depends on "the patients' expectations at the time" (Buckman 1984). Research in finance (Conrad, Cornell et al. 2002) has acknowledged timing as a factor in perceptions of bad news. In their article "When is Bad news really Bad news?" Conrad et al. (2002) imply that while a specific piece of news can be taken as "bad news" in good times, it will not be categorized as "bad news" if it was reported in bad times. Investors react more strongly to bad news than good news in good times. The timing of bad news reporting has also been researched in the accounting literature. Kothari et al. (2009) reports that managers often delay reporting bad news to stakeholders when it could affect stock prices. However, they are apt to more quickly reveal bad news when there is a litigation risk. Research in finance (Yermack 1997), and accounting (Aboody and Kasznik 2000) demonstrate that bad news reporting can be accelerated under certain conditions. Their research shows how managers hasten bad news reporting in the period prior to option grant dates so as to lower the exercise price of options. Hence, there is an acknowledgment in medical, accounting and finance literature that there is a time element to bad news reporting but no research in IS has investigated this. Moreover, Bies (2013) claims that there is a need for qualitative research to better understand the process by which bad news is reported since little is known in this area.

Summarizing, little is known about types of bad news and the process of **how** bad news reporting plays out over time in an IS project. The aim of this exploratory research study is to address this gap in our understanding by using a case study approach.

RESEARCH METHODOLOGY AND DESIGN

The case study approach has been used for exploratory research on domains where knowledge is scant (Bonoma 1985; Yin 2003). It is appropriate where few studies have been carried out in the past and valuable insights are needed to analyze a phenomenon (Benbasat, Goldstein et al. 1987). The case study method is appropriate for answering "how" and "why" questions and for studying a phenomenon in the natural setting in which it occurs (Yin 2003). Case studies are the preferred method of study for examining "sticky, practice-based problems where the experiences of the actors are important and the context of the action is critical" (Benbasat, Goldstein et al. 1987).

A multiple case study approach (Figure 1) is being taken since it is considered more robust than a single case study design (Yin 2003). Theoretical sampling (Strauss 1987) is used in selecting cases having contrasting characteristics. Two information-rich environments are selected for this study: the education sector and the technology sector (Patton 1990). Industry sectors differ in the maturity of their project management practices (Cooke-Davies and Arzymanow 2003). The accountability of projects in public funded organizations is different from private sector organizations due to differences in the organizational environments (Bretschneider 1990). Other distinguishing characteristics of these two environments might include degree of bureaucracy, expectations regarding profitability of a project, speed of execution, and level of public visibility. Thus, we anticipate that the handling of bad news on IS projects in a publicly funded educational institution will be different from that which occurs in a privately owned company in the high-tech industry. Additionally, most organizations will have multiple projects running in parallel. Projects with higher priority will get preference in resource allocation than projects with lower priority (Engwall and Jerbrant 2003). Perception of bad news in these projects will also differ. For example, non-availability of a programmer for a few days in a low priority project might not be considered critical and will therefore not be viewed or reported as bad news, whereas the same event in a high priority project will be viewed as bad news and very possibly reported as such. Hence, we anticipate that within an organization project management practices (including perception and reporting of bad news) will differ significantly between high vs. low priority projects. Furthermore, within each case, for the same bad event, we anticipate that the bad news reporting perspective of each stakeholder in the project will be different. Data collection will be done from various stakeholders in the same project. These difference in characteristics will allow for cross-case analysis and within-case analysis (Strauss 1987) (Figure 1) which will provide interesting insights to the phenomenon of bad news reporting.

Ultimately, the intent of this research is to develop theories based on case studies (Eisenhardt 1989) learning from the experience and knowledge of practitioners (Benbasat, Goldstein et al. 1987). The unit of analysis is instances of "bad news reporting" in the course of an IS project.

		Industry Sector	
		Education (Public)	Technology (Private)
ject ality	High priority project (strategic)	Case 1	Case 2
Project Criticality	Low priority project (tactical - departmental)	Case 3	Case 4

Figure 1

Data collection will be done primarily through semi-structured interviews and access to secondary data like project related documentation (Corbin and Strauss 2015). Interviews have been used predominantly as the primary mode of data collection in case study research (Myers and Newman 2007). Interviews will be open-ended to elicit examples of bad news reporting phenomenon across a project, based on a semi-structured interview protocol. The informants will be asked to describe a project from its inception to completion describing instances of bad news, when during the course of the project the bad news occurred, how such news was perceived at the time, whether or not it was reported and why (or why not). The primary informant in each site will help identify the initial list of informants to be interviewed. The informants will be identified from a list of project managers, team leaders, systems analysts,

programmers and end-users in each project. Further, snowball sampling (Patton 1990) will be used to recruit additional informants who can provide critical information about bad news reporting in those projects. A target of 5-10 per informants per project is intended, for interviews totaling to 20-40 informants (all the boxes in the grid of Fig 1) in total. Semi-structured interviews lasting no more than one and half hours will provide data on how bad news reporting plays out in a project. All interviews will be recorded and transcribed, thus serving as the primary source of data. If necessary, follow up interviews will be conducted to seek clarification and additional insights. Documentation used in the projects will be used as secondary data (Webb, Campbell et al. 1966). Through interviews and documentation collected, the researchers seek to obtain deep insights into the way bad news is reported in the course of the project. The role of the researchers in the project will be that of an observer, which helps the researcher collect data in a natural setting and elicit less self-conscious responses from the informants (Barley 1990).

Theoretical conceptualizations will be done based on rigorous and systematic analysis of data (Miles and Huberman 1994). An interpretive approach will be used in data analysis since "our knowledge of reality is a social construction by human actors" (Walsham 1995) and our own background, knowledge and prejudices influences how we see the world (Walsham 2006). Data will be collected and analyzed across two different perspectives (Fig 1):

- 1. Within-case: (a) different perspectives of bad news reporting of the same bad event from different stakeholders (b) different perspectives of bad news reporting of a similar or comparable bad event across time in the same project.
- 2. Cross-case: perspectives of bad news reporting of a similar or comparable bad event across (a) different criticality of projects in the same organization and (b) different industries

Analysis of the data will start by initially open coding the data, followed by axial and selective coding (Corbin and Strauss 2015). Open coding will involve unrestricted coding of data by scrutinizing interview transcripts and field notes to produce concepts and map them to categories. Following Straussian version of the grounded theory method (Kelle 2005), our data analysis approach acknowledges that prior theory, literature, personal and professional experience can serve as a guide in coding. As is the norm in grounded theory building, theories will be developed iterating between existing literature and data collection. The goal of this research is not to test any theory but to use theory as a sensitizing device in the analysis (Klein and Myers 1999). Drawing ideas from prior literatures, we will attempt to analyze the data with seed concepts like bad news related to time, context, cost, quality issues, stakeholder perceptions, criticality, technology or social issue etc. Since this study is exploratory, the researchers remain open to broader concepts or phenomena that can evolve from data during the course of the analysis. Additional theories will be explored that can explain newly discovered concepts. In the process of axial coding, opportunities would be investigated to discover relationships between categories or concepts identified in the open coding phase. In selective coding, core categories would be summarized "that relate to the core codes in sufficiently significant ways as to be used in a parsimonious theory" (Strauss 1987). Data displays would be used as described by Miles and Huberman (1994) for doing within-case analysis and cross case comparisons. As is typical in qualitative case studies, data collection and analysis will be intertwined. Data collection will continue until theoretical saturation or informational redundancy is reached (Sandelowski 1995) and no additional themes evolve (Corbin and Strauss 2015).

EXPECTED CONTRIBUTIONS

This research is expected to contribute to the literature on bad news reporting in a number of ways. There can be many instances of bad news reporting and different types of bad news during the course of an IS project. Additionally, in an organization the same news in one project might not be considered bad news in another project. This exploratory study will be one of the first to explore this phenomenon in IS projects with the aim of building theory (George and Bennett 2005) analyzing the phenomenon of bad news reporting. Moreover, it also seems plausible that people might perceive and respond to different types of bad news in different ways. This can result in development of a typology (Doty and Glick 1994) of bad news types and responses to bad news. The research findings will also contribute to practice by making managers aware of factors that might prevent bad news from being reported in a timely manner. Management can hence make efforts to make the environment conducive for truthful and timely reporting of bad news, which might avoid project disasters.

LIMITATIONS AND PRESENT STATUS

No research is perfect and there are always limitations (McGrath 1982). Case studies have been challenged by scholars for not being generalizable. The purpose of case research is to develop theory and not testing. The theoretical contribution of this research might be the starting point of a new stream of research to develop constructs for mainstream quantitative research. Moreover two case studies each from two industries has been used to provide a stronger base for building theory rather than a single case study. Since, the primary mode of data collection is interview, where informants are asked to retrospectively describe past events, there is a chance of recall bias. Informants would be requested to describe instances not more than one year old to reduce this bias. Additionally, there is a chance of informant bias. The researchers are conscious of this and care will be taken by the researchers to instances of bad news in which data can be cross validated by either another informant or through documentation collected from the project.

One of the author's has been a certified PMP who had been a practicing project manager for more than two decades. He is a part of a local Project Management Institute (PMI) chapter and two sites and projects have already been identified. The first site is a public university in the northern part of United States and the second site is one of the world leaders in computer manufacturing. Primary informants of both the sites have been identified who are certified project managers and are a part of the local PMI chapter. IRB approval process has been initiated.

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