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Managing Merger Risk During the Post-Selection Phase

BY

Robert W. Heller

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree
Of
Executive Doctorate in Business
In the Robinson College of Business
Of
Georgia State University

Dissertation Committee:
Dr. Pam Scholder Ellen (Chair)
Dr. Lars Mathiassen
Dr. Vikas Agarwal

GEORGIA STATE UNIVERSITY
ROBINSON COLLEGE OF BUSINESS
2013

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Robert William Heller

2013

ACCEPTANCE

This dissertation was prepared under the direction of the Robert Heller's Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Executive Doctorate in Business in the J. Mack Robinson College of Business of Georgia State University.

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DISSERTATION COMMITTEE

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ABSTRACT

Managing Merger Risk During the Post-Selection Phase

BY

Robert William Heller

April 8, 2013

Committee Chair: Dr. Pam Scholder Ellen

Major Academic Unit: Robinson College of Business

Mergers and acquisitions (M&A) are an important part of many companies' strategic plans, yet they often fail to meet expectations. Part of this failure may be due to a lack of understanding of the risks present during the important period after the initial agreement to merge has been struck and the failure to apply a practical framework for managing these risks. The literature outlines many of the risks managers face and explains risk resolution techniques that can be used to mitigate these risks. Risk management techniques or frameworks have been developed for use in projects involving mergers and acquisitions (M&A), construction, strategic alliances, software requirements development, distributed software projects, and post-merger implementation of information systems. However, to our knowledge, no integrated framework has been developed to manage risks during the post-selection phase of mergers and acquisitions.

In this dissertation we identify risks present and the risk resolutions available at this stage of the M&A process via a review of the literature and interviews with experienced managers of

mergers and acquisitions. We then develop a practical framework for managing post-selection phase risks in M&A. We analyzed published case studies to evaluate the framework and confirm issues raised in the literature review. Hence, this research contributes to the M&A and risk management literature by identifying and classifying the risks in the post-selection phase of the M&A process, identifying and developing a classification of risk resolution actions linked to those risks, and providing a practical framework that can be used to more comprehensively identify risks and potential risk management strategies.

INTRODUCTION

Mergers and acquisitions (M&As) are important to many companies implementing growth strategies and other company transformations. Other companies who may not wish to pursue M&As as part of their corporate strategy may be subject to unwanted acquisition proposals, competitors' acquisitions of other key industry players, or pressure from public shareholders to participate in the M&A market as either an acquirer or target. Even large companies are not isolated from the possibility of a buyout, as evidenced by the $46 billion buyout of TXU Corporation in 2007, the $32 billion buyout of HCA in 2006, and six other buyouts from 2006 to 2008 of companies with a market cap of more than $20 billion (Jenkinson and Stucke, 2011). For smaller and privately-held companies, being acquired may provide the most effective exit strategy for their owners to obtain liquidity.

Despite the prevalence and importance of M&As, they do not work out particularly well, at least for the acquiring company. Researchers have found that acquirer results are usually not considered good either by their management (Bruner, 2002) or by researchers (King, Dalton, Daily et al., 2004). Overall, from a financial point of view, acquirers would often be better off foregoing the mergers they instigate. The acquired company does better, since its stock price is likely to go up after the merger is announced to reflect the premium paid by the acquirer (Bruner, 2002).

Researchers have sought to determine why M&A performance is so poor. Antecedents to mergers have been examined to determine what characteristics of mergers might be moderators of performance. These conditions include deal characteristics such as payment type, deal type (Hayward and Hambrick, 1997) and relatedness, managerial effects such as ownership and

managerial experience (Pablo, 1994), firm characteristics such as firm size and acquirer experience, and environmental factors such as waves and regulations (Haleblian, Devers, McNamara et al., 2009). Generally the antecedents are not good moderators of acquisition performance (King, Dalton, Daily et al., 2004).

In addition, management may not have control over the antecedents even if they could be found to be helpful. For example, recognizing that it may be helpful to make acquisitions at the beginning of a merger wave is only helpful if management can recognize the beginning of a wave and is in a position to undertake an acquisition at that time.

Jemison and Sitkin (1986) examined the acquisition process to explain M&A performance. Their work supplemented the focus on strategic and organizational fit previously used to explain acquisition outcomes. They identified four process perspective issues that can negatively affect M&A performance: activity segmentation, escalating momentum, expectational ambiguity and management system misapplication. Others have identified many additional process-related issues that can impede the success of a merger. In this dissertation, we focus on the issues that arise during the post-selection phase, that is, after a merger has been agreed to by both parties.

The post-selection phase of the M&A process is an important one for the success of a merger. The success of the integration and resource management of the companies is often determined by management actions during this period (Jemison and Sitkin, 1986). The literature provides strong endorsement of the need for thorough due diligence (Angwin, 2001) and planning for the post-merger integration of the firms during the post-selection stage (Epstein, 2004). Haleblian, Devers, McNamara et al. (2009) highlighted the need for more understanding of "the implementation of acquisitions, especially about how firms integrate, transfer, and

manage the resources of the combined firm, which underscores the need for greater focus on acquisition implementation in general" (p. 490).

Some M&A failures have been attributed to the lack of risk management during the post-selection phase of the M&A process (Epstein, 2004). Specific risks to M&A success identified in the literature include corporate culture (Appelbaum, Gandell, Yortis et al., 2000) and delays in implementing post-merger integration (Epstein, 2004). Harris (2007) sought to systematically determine the most important M&A risks for a particular company based on the experiences of their management team, but did not provide risk resolutions or a framework for managing risk.

Researchers want to understand the risks and develop a risk management process for large, complicated corporate endeavors such as IT projects, construction projects and segments of the M&A process. A variety of methods have been used to guide managers in understanding and managing the risks in these types of projects. These methods range from relatively simple check lists that remind managers of possible risks to more involved risk management frameworks that help identify, prioritize and resolve risks.

However, the literature does not provide a comprehensive list of risks and resolutions for the post-selection stage of the M&A process, nor does it classify risks and resolutions in a manner conducive for use by practitioners. Finally, the literature fails to provide a risk management framework for use in managing risks in the post-selection stage of M&A.

In our research, we first developed a list of the risks that may arise during the M&A process and methods to resolve these risks based on a review of the literature. We then synthesized them into risk areas and interviewed M&A practitioners to verify the risks and risk resolutions. We applied the resulting risk management framework to published case studies to

determine its usefulness in the M&A process. The result is the first risk management framework for the post-selection phase of the M&A process.

This framework provides an approach for practitioners and researchers to use in evaluating the risks present in an M&A process. Using this approach, practitioners may be able to better assess the riskiness of a merger, identify appropriate risk resolution strategies, and improve future merger evaluations by documenting this how the framework could enhance or be adapted to their process . Researchers may be able to use the framework to help explain M&A process issues and outcomes, and to assist practitioners in applying the current knowledge about the moderators of M&A performance to the M&A process.

LITERATURE REVIEW: MERGERS AND ACQUISITIONS

Mergers and acquisitions (M&As) are an important part of the strategy many corporate managers use to grow their companies and increase company value. In 2011, forty thousand mergers worth over $2.5 trillion were completed worldwide (Reuters, 2012). While the quantity of mergers fluctuates cyclically as economic and market conditions change, the 2011 M&A activity represents an increase in the total value of M&A transactions from $829 billion worth of mergers in 1995.

This trend illustrates the importance of M&A as a component of the corporate strategy toolkit. Boosting corporate growth rates or pursuing corporate strategies via M&A is contemplated by many companies and implemented by a large number. For example, in looking at the diversification programs of thirty-three companies over a thirty-six year period, (Porter, 1987) found that more than 70% of the companies' attempts to diversify were done via acquisitions as opposed to start-ups or joint ventures. Another strategic use of M&A is with corporate divestitures to rid oneself of underperforming units or focus resources.

Even corporate managers not interested in M&A as part of their growth strategy may have to be prepared to be involved in a merger. Publicly-traded companies may become the target of an unsolicited merger offer, and for private companies the sale of a company maybe the most viable means of obtaining liquidity for the shareholders.

The terms merger, acquisition, and M&A are used interchangeably in this dissertation to describe transactions where a change of control in ownership occurs. This type of transaction is distinct from strategic alliances, joint ventures and partnerships that do not usually entail a change of control and often require little integration of existing company operations.

II.I Frequent Failures

Given the importance of M&A in corporate strategy, as well as many spectacular examples of M&A failures, researchers have attempted to determine if executing M&As is a successful strategy. One of the spectacular failures documented in the literature is Quaker Oats purchase of Snapple for $1.7 billion in 1994, which Quaker Oats sold for $300 million in 1997 (Hitt, Harrison and Ireland, 2001). The loss of up to $6 billion by AT&T in the purchase of NCR is another well-documented example of merger failure (Lys and Vincent, 1995). In addition to the large, well-documented failures, the literature shows that on average acquirers fail to achieve above average returns from their mergers. In summary, when the acquirer and target are considered together, slight gains are noted in the short term (around the time of the merger announcement) but they suffer negative returns in the longer term (Bruner, 2002). Merger studies differ in the measures used to evaluate success (Martynova and Renneboog, 2008). The primary measures include abnormal returns, accounting studies, and managers' evaluations of merger success (Bruner, 2002). The literature conducted using these three measures shows that M&As in general do not work out well: that is, researchers have not found positive long term benefits from M&As.

II.I.i Abnormal returns literature. The most prevalent measure of merger success is the abnormal returns metric, measured as compound abnormal returns ("CAR") (Martynova and Renneboog, 2008). An abnormal return is the difference between the realized returns from a company's stock compared to a benchmark return that presumably would have been realized if no merger had taken place. Its use for measuring short-term share price changes is based on the assumption that markets are efficient, that is, upon announcement of the proposed merger, the share prices of the acquirer and target will reflect all information available about the gains to be

realized in the future from the combination of the two companies. One reason the CAR measure is frequently used is because large samples of publicly available data can be obtained (Toschi, Bolognesi, Angeli et al., 2007).

The long-term shareholder wealth effects from M&As have also been explored using compound abnormal returns. Studies based on eighteen to sixty months of stock performance help answer the concern that evaluating merger results in the short term reflects only what the market indicates will be the results of the merger, but does not tell us if the merger achieved strategic goals. However, when used for longer-term studies, this approach has several shortcomings. One, it is difficult to disentangle the effect of the merger from other effects on a company's stock price when evaluating stock price performance over a long time period. Second, some of the calculations of benchmark performance suffer from statistical issues or shortcomings, such as the use of imperfectly matched firms for comparison with the merged company (Bessembinder and Zhang, 2012). Lamenting the lack of a viable benchmark against which to test, one researcher commented that "The fact that financial economists look at these articles as scientific fact is beyond belief. There is simply no way to assess the long-term implications of an acquisition given the data that is available" (Shojai, 2009, p. 9). Third, theories of stock market efficiency predict that any future gains to be derived from the combination of the two firms will be reflected immediately in their stock prices upon the merger announcement. If that is the case, one should not expect any abnormal returns over the long term since they would all be incorporated in the short term.

Meta-analyses of M&As show that, in the short term, stock prices of the <u>targets</u> in M&A deals show positive CARs (see Table 1 below). Evidence for <u>acquirer</u> CARs is less conclusive, possibly reflecting concerns that the acquirer has overpaid or that any expected gains from the

combination have been realized by the increase in the target's stock price. The combined companies achieve positive short term CARs, which is generally attributed to an efficient market evaluating the prospects of the combined company favorably.

Studies of CARs indicate that, in the long term, merged companies fail to outperform their benchmarks. These studies with a long-term focus usually analyze the period six months after the merger announcement to several years later. Table 1 summarizes the results of five meta-analyses that evaluated 290 studies of the performance of over 200,000 M&As. The plus and minus signs indicate the authors concluded that the studies they evaluated indicated positive or negative CARs. The zeros indicate that the results were not definitive.

Table 1 – Summary of M&A Meta-Analyses

Focus of Study	Time Period	
	Announcement Date	**Long Term**
Acquirer Returns	+[K],0[T],0[M],0[B]	NA
Target Returns	+[K],+[B],+[M],+[T]	NA
Merged Company Returns	+[M],+[B],+[T]	-[M],-[K],-[B],-[A]

T= (Toschi, Bolognesi, Angeli et al., 2007)
K= (King, Dalton, Daily et al., 2004)
M= (Martynova and Renneboog, 2008)
A= (Agrawal and Jaffe, 1999)
B = (Bruner, 2002)

II.I.ii Accounting studies. In the accounting studies approach the financial operating performance of the combined companies is used to evaluate M&A performance over the long term. These financial metrics include such measures as return on equity, return on assets, sales growth, net income, and profit margins. This method captures the financial performance of the combined firm after the merger is complete and compares it to the financial performance of

similar companies or industry performance. A meta-analysis by Martynova and Renneboog (2008) reviewed 26 studies and found that 14 (59%) showed a post-merger decline in operating returns, and only five "provide evidence of a significantly positive increase" (p. 2168). After finding that 21 of 26 studies, covering over 6,500 acquisitions, showed a decline or no significant changes in operating returns, Martynova and Renneboog (2008) concluded that there is little evidence that merged companies experience long-term improvements in operating performance. The accounting studies methodology is limited in that operating metrics do not adjust for other issues affecting company performance (Lubatkin, 1983). In addition, a merger may be successful in achieving strategic goals that are not reflected in a company's financial statements.

II.I.iii Management evaluations. Another measure of merger performance is management evaluations of the success of mergers, obtained either through surveys of managers or in the course of a case study. Bruner (2002) reviewed ten studies that used managers' evaluations of the success of mergers. Combining the results from those ten studies, we found an average of 63% of the deals evaluated were not deemed by company managers to have performed at an above-average level. For one of those articles, the authors interviewed the managers of companies involved in 53 mergers in high-tech industries and found that only nine (17%) of the 53 were considered successful. The others were considered failures or their returns on investment were disappointing (Chaudhuri and Tabrizi, 1999). These surveys of practitioners provide insight into how those who are involved with mergers evaluate their success. The case study method may also give us richer detail as to the reasons for a merger failure than other methods. However, both may be limited in their generizability (Bruner, 2002).

II.I.iv Conclusion. It appears that acquisitions on average fail to provide much benefit to the acquirer. Only the acquired companies appear to obtain a benefit from the premium paid for

its stock in the merger versus the pre-announcement stock price. The state of M&A performance can be summarized as follows: "Quite simply, we find no evidence that acquisitions, on average, improve the financial performance (e.g. abnormal returns or accounting performance) of acquiring firms after the day completed acquisitions are announced" (King, Dalton, Daily et al., 2004 p. 195).

II.II Explaining Failures

Given that large numbers of M&A do not appear to be helping companies, researchers have attempted to identify when value is gained in mergers. They have investigated moderators of acquisition performance such as how a deal is sourced, whether the form of payment is in cash or stock, and the strategic fit of the two companies (Weber, Tarba and Bachar, 2011). The potential moderators have been categorized in a framework set forth by Haleblian, Devers, McNamara et al., (2009) as:

1) *deal characteristics* such as payment type and deal type (Agrawal, Jaffe and Mandelker, 1992);

2) *managerial effects* such as managerial ownership and target management experience (Pablo, 1994)**;**

3) *environmental factors* such as waves and regulations (Martynova and Renneboog, 2008); and

4*) firm characteristics* such as acquirer experience (Haleblian and Finkelstein, 1999) and relatedness of the merging companies.

Table 2 provides a summary of some of the conclusions reached by researchers who have used the moderators mentioned by Haleblian, Devers, McNamara et al (2009).

Table 2 – Potential Moderators of M&A Performance

Category	Antecedent	Hypothesized Relationships	Result
Deal Characteristics	Payment type	When acquirer uses cash as payment for an acquisition, mergers will produce better returns than when equity (which management presumably recognizes as undervalued) is used.	Payment type not significant in explaining performance during immediate term or one year periods (Hayward and Hambrick, 1997). Moderation of cash or equity use by acquirer not significant in short term or long term based on 43 studies with total sample size of 7,325 (King, Dalton, Daily et al., 2004).
Deal Characteristics	Deal type	Acquirers underperform after mergers but not after tender offers	CARs are small and insignificantly different from zero, thus "no evidence of unusual performance from tender offers" (Agrawal, Jaffe and Mandelker, 1992, p. 1611).
Managerial Effects	Managerial ownership	Higher ownership levels by management will lead to improved alignment of interests with shareholders and positively influence merger results.	"In general, research examining the effects of equity holdings and incentive pay on acquisition behavior and performance has returned mixed results" (Haleblian, Devers, McNamara et al, 2009., p. 481).
Managerial Effects	Managerial experience	Amount of CEO experience or firm experience with mergers may impact merger results.	Moderation not indicated across seven studies which with total sample size of 1399 (King, Dalton, Daily et al., 2004).
Environmental Factors	Waves	Buying during merger waves, which are periods with many mergers, improves merger performance.	Some value can be created by participating in a merger wave, particularly if it is near the beginning of the wave (Martynova and Renneboog, 2008; McNamara, Haleblian and Dykes, 2008).
Environmental Factors	Regulations	Changes in regulations or regulatory events such as new interpretations of laws can change the returns from M&As.	Regulatory reforms may have harmed bidder returns (Asquith, Bruner, & Mullins, 1983; Malatesta & Thompson, 1993) but may have been beneficial to target returns (Bradley, Desai and Kim,1988).
Firm Characteristics	Relatedness	Resource, product or market similarity between acquiring and acquired firm may improve merger performance.	No moderation indicated in studies with an event window at time of announcement (thirteen studies with 2191 sample size) or up to five years later (six studies with 455 sample size) (King, Dalton, Daily et al., 2004). Some studies have theorized excess

			returns to acquired firm shareholders only (Barney, 1988).
Firm Characteristics	Acquiror Experience	Firms with more acquisition experience will produce better returns from M&A.	Results of initial M&As may be positive, followed by poorer performance on subsequent acquisitions, until the experience again produces positive returns (Finkelstein and Haleblian, 2002).

II.II.i Deal characteristics. When an acquirer chooses cash instead of stock as payment for an acquisition, managers may be signaling that they believe their company's stock is undervalued and they expect post-acquisition performance to be stronger than the market expects. If method of payment is a moderator of M&A success, acquisitions paid for with cash should outperform stock acquisitions. The meta-analysis by King, Dalton, Daily et al. (2004) and the later review of this segment of the literature by Haleblian, Devers, McNamara et al. (2009) both concluded that the empirical support for this theory was weak.

II.II.ii Managerial effects. Another explanation for M&A performance is the impact of management, including the level of managerial ownership and management characteristics. Although concerns related to agency theory and management choices arise when management ownership of equity and compensation programs do not align with shareholder interests, the research is not conclusive on this issue (Haleblian, Devers, McNamara et al., 2009). Other research examined management characteristics, including capabilities, knowledge, and hubris. Some research has indicated that management characteristics influence merger returns either negatively in the case of hubris (Hayward, Hambrick,1997) or positively in the case of previous management experience with the target via strategic alliances (Porrini, 2004).

II.II.iii Environmental factors. Investigations into waves of mergers reveal that some value can be created by participating in a merger wave, particularly if it is near the beginning of

the wave (Martynova and Renneboog, 2008; McNamara, Haleblian and Dykes, 2008). However, taking advantage of the beginning of these peaks in M&A activity requires recognizing that it is a wave and knowing that you are not nearing its end. Having this information may also be of limited practical value to managers, as merger waves may not coincide with an acquirer's strategic need for an acquisition or its management's capability to conduct a merger process.

II.II.iv Firm characteristics. Research into firm characteristics such as acquirer experience has produced mixed but potentially interesting results. In a meta-analysis of seven studies with a total sample size of 1,399, King, Dalton, Daily et al. (2004) did not find that the acquiring firm management's prior acquisition experience was a statistically significant moderator of acquisition results after the announcement date. However, Haleblian and Finkelstein (1999) found a U-shaped relationship between experience and performance, with early acquisitions by a team showing good results, then poor results followed by a return to good results. Their conclusion was that inexperienced managers improperly applied experience from their first successful acquisition to subsequent dissimilar acquisitions, while more experienced acquirers were able to avoid that mistake. Others believe that both individual and organizational experience may be needed to avoid integration problems (Haspeslagh and Jemison, 1991).

Those linking experience and M&A results have posited that experience in merging related businesses instead of unrelated businesses brings better outcomes (Finkelstein and Haleblian, 2002). However, Chatterjee (2009) proposed that previous studies, which relied on Standard Industrial Classification (SIC) codes to measure relatedness, were not really measuring relatedness. SIC codes are four digit codes used to classify companies by industry. In Chatterjee's view, SIC codes do not fully reflect the relatedness of companies or the similarity of the experience acquirers gain by serial acquisitions (Chatterjee, 2009). He proposed that

companies with carefully developed and followed acquisition *programs* are more successful acquirers, and that simply making a lot of acquisitions does not lead to greater success. Instead, developing a process and gaining experience with that *process* is a driver of successful M&A results.

II.II.v Process perspective. Since M&A results are not readily explained by the circumstances prior to the post-selection phase, some researchers have looked at the acquisition process as driver of M&A results. This view "recognizes that the acquisition process itself is a potentially important determinant of acquisition activities and outcomes" (Jemison and Sitkin, 1986, p. 145) and that "the content of the acquisition decision forms the upper bound on the degree of success that an acquisition can achieve, whereas the acquisition process affects the degree to which that potential is realized" (Pablo, Sitkin and Jemison, 1996 p. 724). Jemison and Sitkin (1986) identified four process impediments to acquisition success:

1) *activity segmentation* - the segmentation of tasks which produces analyses with an emphasis on strategic fit over organizational fit;

2) *escalating momentum* - forces pushing the process toward completion are strong and lead to inadequate or poor decisions;

3) *expectational ambiguity* – uncertainty or differences in expectations of acquirer and target during the integration phase can lead to unsuccessful integration;

4) *management system misapplication* – attitudes such as arrogance and defensiveness lead to selection of wrong management systems or applying them in heavy handed fashion.

Haspeslagh and Jemison (1991) added three additional problems which they found impact the integration process:

1) *determinism* – failure to adjust to the changing circumstances in an acquisition. This problem is characterized by a “false sense of security” (p. 124) created by the original justification for the merger, and “confusion and frustration” (p. 126) as the situation after the agreement to merge does not match the original justification;

2) *value destruction* – the environment of the merger creates uncertainty and fear among the employees. The employees’ personal negative experience translates into a failure to help create a successful merger;

3) *leadership vacuum* – the involvement of the leadership declines after the acquisition when it is most needed, leaving operating managers to cope with the issues relating to capability transfers without the attention of senior leadership.

Other post-selection and integration-related issues that impact M&A performance have been found, such as management of cultural differences (Weber and Camerer, 2003; Riad, 2005), the autonomy granted the target firm (Datta and Grant, 1990), decision maker agreement (Shanley and Correa, 1992), evaluation of organizational differences and systematic planning for managing them (Datta, 1991), marketing resource deployment (Capron and Hulland, 1999) and organizational restructuring (Barkema and Schijven, 2008). Definitively settling the acquisition performance debate is difficult, and one research team lamented that “because of the lack of process level data typically available for a sufficiently large number of observations… prior research in this area has established few definitive findings” (Zollo and Singh, 2004 p. 1235). However, a few years later Lakshman (2011) concluded: “It is now well accepted that aside from some exceptions, a remarkable number of failures in M&As are due to poor post-acquisition integration” (p. 605).

II.III Addressing Challenges

The management actions that are available to produce better acquisition outcomes depend on the phase of the acquisition process. In the early stages of the process, when decisions such as which target company to pursue and what the goals of an acquisition should be are being made, possible management actions relate to the characteristics and strategic fit of the companies. After the target selection has been made and a tentative deal structure reached, which we call the post-selection phase, management attempts to affect acquisition outcomes must focus on the planning and implementation of the merger.

The literature focusing on the period before the selection of a merger partner indicates that methods of improving M&A outcomes during that period are limited. Managers can attempt to ensure a good strategic fit between the two businesses, hire managers with acquisition experience, time the acquisition for the beginning of a merger wave, and carefully evaluate the national or organizational culture fit between the two companies. The decisions made in this period may be an important determinant of the outcome of the merger and set the upper bound for the performance of the merged companies. However, given the importance of the post-selection process, and the difficulty researchers have had in finding effective pre-selection strategies to increase merger success (Shojai, 2009), much of the literature and this dissertation focus on the post-selection period.

Researchers have proposed solutions to potential problems in the post-selection period:

1) Managers should review their merger process to ensure it includes broadly defined activities such as establishing strategic plans for the merger (Shrivastava, 1986) and “installing a new sense of purpose” (Haspeslagh and Jemison, 1991 p. 172).

2) Other researchers identified narrower issues which they believe are important in the acquisition process, and suggest methods to resolve these issues. Examples of this type of treatment are communicating to reduce uncertainty (Schweiger and Denisi, 1991), redeploying marketing managers bidirectionally between acquirer and target (Capron and Hulland, 1999), understanding the importance of leadership (Sitkin and Pablo, 2005), and appointing an integration manager early in the process (Teerikangas, Very and Pisano, 2011).

3) Some researchers address their solutions to a specific industry (Maire and Collerette, 2011) or for functional areas within firms such as information systems (McKiernan and Merali, 1995) or human resources (Marks and Vansteenkiste, 2008).

II.IV Positioning of Research

A variety of risk lists and other checklists have been presented in the M&A literature, and models for using risk management have been developed for other areas of concern to management. However, we have found no research in the M&A field that provides a framework for using risk management techniques to manage the post-selection phase of mergers and acquisitions. This dissertation provides such a framework.

II.IV.i Process perspective. In this dissertation, the M&As discussed using the process perspective are those that require some degree of integration. These M&As are undertaken to obtain the potential benefits of integration such as operating synergies or increased market presence. Hubbard (2001) describes the four degrees of integration that can occur when companies enter change of control transactions:

1) *total autonomy policy* – no physical integration of acquirer and target, control by acquirer strictly by financial controls. The target operations remain as they were before the merger.

2) *restructuring* followed by financial controls – financial controls are put in place, and the target company is modified via such actions as a change in management or more efficient asset utilization.

3) *centralization* or integration of key functions – key departments or functions are combined to take advantage of economies of scale, and

4) *full integration* – companies merged into one operation.

In the first two situations, the target is left to operate as a stand-alone entity and is not integrated into the operations of the acquirer. In the latter two types of acquisitions some degree of integration takes place. Risks during the post-selection phase are different for companies undertaking some level of integration beyond financial integration than for those which are not. Given the importance of merger integration and the corresponding importance of identifying the risks and risk resolutions that come with integration, our research focused on the latter two integration levels.

II.IV.ii Post-selection phase. This dissertation focuses on the risks an acquirer faces after the selection of the merger partner, here called the post-selection phase. The post-selection phase begins when the acquirer and target have an agreement to consummate a transaction. Their agreement may take the form of a verbal agreement, a letter of intent, or it may be reflected in a merger agreement. The final merger agreement usually is binding, and may even entitle the target to compensation if the merger is not consummated (Davidoff, 2009). Although a letter of intent often does not bind either company to complete a transaction, at this point the strategic fit decision has been made. Our contention, which is in line with the literature, is that the post-selection phase begins the process of planning for and implementing the integration of the companies. Researchers maintain that a significant part of the potential value of M&As is

created or lost in the post-selection phase, and some even posit that "All value creation takes place after the acquisition; hence the critical importance of the quality of the post-merger integration process" (Haspeslagh 1991, p. 15). Therefore, a tool that can be used to identify and manage the risks inherent in the process should be helpful to managers seeking to increase value creation in M&A.

LITERATURE REVIEW: RISK MANAGEMENT

III.I Importance of Managing Risk

Managing risk is important in the management of organizations, especially when significant, nonroutine projects are undertaken (Merna and Al-Thani, 2008). In fact, some believe that managing risk is the essence of management (Das and Teng, 1998) The importance of managing risk extends to the M&A process, given the degree to which the pre-selection phase expectations of the partners are realized depends upon the process used to implement the merger post-selection. Pablo, Sitkin and Jemison, (1996) highlight the "non routineness, speed of decision making, and restricted use of information" of acquisitions which are "process-related contributors to acquisition riskiness" (p. 725). Thus, "it is important that we focus on understanding the characteristics of the acquisition process and the factors, including risk, that influence those characteristics" (Pablo, Sitkin and Jemison, 1996, p. 724).

III.II Description of Risk

We focus on definitions of risk that emphasize the relationship of risk to decision-making and opportunity cost. Sitkin and Pablo (1992) described risk as "a characteristic of decisions … to which there is uncertainty about whether potentially significant and/or disappointing outcomes of decisions will be realized" (p. 10). Charette (1990) listed three conditions for risk to exist:

1) The potential for loss must exist.

2) Uncertainty with respect to the eventual outcome must be present.

3) Some choice or decision is required to deal with the uncertainty and potential for loss.

As is the case with studies of M&A outcomes, the appropriate measure of outcomes when evaluating risk must be addressed. Some outcomes are easy to characterize, such as when merged companies rapidly decline into bankruptcy. We evaluate that situation as a failure. But

there are M&As that do not result in as definitive a decline, but instead fail to meet other performance targets. These targets might be: earning more than the risk-adjusted cost of capital; operating performance at or above that used to justify the merger decision; returns to the acquiring shareholders above those which would have realized had the merger not occurred; achieving strategic goals of the transaction; or coping with an external threat successfully as a combined company. We include in the description of risks those outcomes that make us worse off than the current position and outcomes which are not as good as some other outcomes that might have been obtained (MacCrimmon, Wehrung and Stanbury, 1986).

III.III Risk Management

Organizations faced with process-related risks attempt to cope with them by the use of risk management. Risk management is "any set of actions taken by individuals or corporations in an effort to alter the risk arising from their business" (Merna and Al-Thani, 2008, p. 35). Various authors have suggested risk management processes (Chapman and Ward, 2003; MacCrimmon, Wehrung and Stanbury, 1986; Boehm, 1991; Merna and Al-Thani, 2008). These approaches vary in detail and flexibility, but they all address three components of the risk management process: *risk identification; risk analysis; and risk response*.

1. Risk Identification

In *risk identification,* the risks that could impact the process are identified and their characteristics documented. Techniques to identify risks include: probing managers or experts via brainstorming, Delphi technique and interviews; assumption analysis; and risk registers or checklists, which are often derived from previous experience (Merna and Al-Thani, 2008). During the risk identification stage, a large number of risks may be identified, so *risk analysis* is used to determine which risks should receive particular attention.

2. Risk Analysis

In *risk analysis,* the probability of loss and the magnitude of the potential loss are assessed for the previously identified risks (Boehm, 1991). Risk analysis can emphasize quantitative or qualitative analysis. Quantitative techniques "attempt to determine absolute value ranges together with probability distributions" (Merna and Al-Thani, 2008, pg. 56) for the impact of risks on the results of the project. Quantitative techniques include decision trees, Monte Carlo simulation, sensitivity analysis, and probability-impact grid analysis (Merna and Al-Thani, 2008). Users of qualitative techniques seek relative values as opposed to absolute values for the impact of these risks. Qualitative techniques include checklists, risk registers, Delphi and probability-impact tables.

Boehm (1991) developed a qualitative technique to analyze the risk exposure of software projects. With this technique, the level of risk affecting a project outcome and the amount of the loss are used to determine the risk exposure (RE) of a project. This can be stated as the formula

$$RE = P(UO) \times L(UO),$$

where P(UO) is the level of risk affecting a project outcome, and L(UO) is the amount of the loss which would result from the risk.

After developing impact and probability estimates for each risk, managers can rank order them by risk exposure to assist in developing the risk management plan for the project. This method has been used to study software-related project risks (Boehm, 1991; Keil, Cule, Lyytinen et al., 1998; Persson, Mathiassen, Boeg et al., 2009), to evaluate risks between rather than within projects (Baccarini and Archer, 2001), and in post-merger IT integration by (Alaranta and Mathiassen, 2011).

Some project management scholars are skeptical of qualitative evaluations using the probability-impact technique. They believe the probability-impact approach "delivers very little useful information and even less real insight" (Chapman and Ward, 2000, p. 294). They object to the noniterative use of probability impacts. They maintain this may produce crude estimates of probability and impact which are then obscured when risk exposure estimates from different risks are combining into indices. They are also concerned about the process used to elicit the probability and impact ratings from managers. Their concern is that the concepts of low, medium and high are not clearly understood to be the same by all the managers who are asked to use those measures in evaluating a project (Chapman and Ward, 2003, p. 170).

Researchers who have used qualitative evaluations have recognized or attempted to mitigate these concerns. In many circumstances, exact probabilities cannot be determined in a timely and cost effective manner, so a quantitative approach is not an option. Exact probabilities may not be needed to guide management action, as the relative importance of risk factors may be sufficient to guide management. Probability measures of risk and more accurate dollar measures of impact may be important in deciding which proposed project to pursue, as when providing sensitivity analysis or project profitability projections to the Board of Directors. However, once a project has been selected, Boehm's approach is often an appropriate risk management tool. Some researchers have also conducted an iterative process, during which the meanings of risk constructs are evaluated and refined (Persson, Mathiassen, Boeg et al., 2009; Harris, 2007).

3. Risk Response

In the *risk response* stage, a plan is developed to eliminate, resolve or mitigate the risks where possible. This can also be referred to as the risk control step (Boehm, 1991) or a risk

response planning phase (PMBOK Guide:2000 Chapter 11). The techniques used in this stage include:

1) *risk avoidance*, which is removing a threat either by avoiding projects exposed to that risk or removing it from the project;

2) *risk reduction*, lowering the likelihood or impact of a risk;

3) *risk transfer,* shifting or sharing the risk with others through insurance or contractual arrangements, and

4) *risk retention*, retaining the risk unintentionally due to failure to manage the risk analysis or risk identification stages, or intentionally in order to reap the benefits which come with bearing that risk (Boehm, 1991; Merna and Al-Thani, 2008).

III.IV Risk Management in M&A

The logical model prevalent in risk management literature assumed that decision makers manage risks in a consistent manner by evaluating expected risks and returns, with only the best interests of the company and its shareholders in mind. Under this decision theoretic conception of risk, "two decision makers viewing the same acquisition candidate… should arrive at essentially the same objective risk profile" (Pablo, Sitkin and Jemison, 1996, p. 730). However, further research has explored differences between the logical model and actual management decision processes regarding risk management and M&A. One such difference is when managers work to reduce their own personal risk, such as the risk of losing their job, by engaging in mergers whose returns do not justify the risk incurred by their company (Amihud and Lev, 1981). MacCrimmon, Wehrung and Stanbury (1986) determined that the decisions executives make in risky situations differ from those based strictly on the expected value of the possible

results. They also found that the risk propensity of decision makers, who they characterized as risk seekers and risk avoiders, influences their perception of the risk level of a decision.

March and Shapira (1987) showed that managers' approach to risk differs from the logical model in several ways. First, many managers do not consider the possible positive outcomes from a decision as an important component of risk, but instead focus on the negative possibilities. If a manager is only considering a portion of the possible outcomes, her decision process is not using accurate probability distributions. Second, managers view risk more in terms of the magnitude of possible losses than in terms of a probability concept. Third, managers do not view risk as something that is readily or usefully quantifiable, either using expected value or other constructs. Sitkin and Pablo (1992) noted that the likelihood of extreme outcomes are often overweighed by individuals. They also theorize that the behavior of decision makers is guided by their risk propensity, another deviation from the decision theoretic conception of management behavior.

Researchers have examined managements' risk management decision-making in the M&A process. When Pablo, Sitkin and Jemison (1996) looked at risk management during acquisitions, they found that managers in M&A situations use risk responses mentioned in the risk management literature such as "exerting influence, developing additional decision alternatives, delaying, and risk-sharing" (Pablo, Sitkin and Jemison, 1996 p. 735).

As discussed earlier, M&A decision makers often have to anticipate or respond to three characteristics of the M&A process: escalating momentum; fragmented perspectives; and ambiguous expectations (Jemison and Sitkin, 1986). Pablo, Sitkin and Jemison (1996) argue that responses to these M&A risks are moderated by the decision makers' risk propensities. For example, high perceived risk in an acquisition situation leads to the use of risk adjustment

techniques, such as delaying the transaction or seeking more information. If the decision maker is risk averse, she will be more likely to seek to reduce the escalating momentum than a risk-seeking decision maker. Thus risk has been recognized as important in the acquisition process, the importance of the behavioral decision model has been established in the M&A post-selection phase, and the model has been linked to specific issues such as risk propensities and perceived riskiness. It appears that managers in M&A situation do not demonstrate strict adherence to the logical model.

Harris (2007) looked at managers' risk perceptions of acquisitions made as part of an acquisition program. Working with the management team of a company, she helped them identify risk constructs to develop risk profiles for past and future acquisitions. By rating each of the four recent acquisitions in which the management team had participated, they were able to score the relative riskiness of each acquisition and identify areas where the risk might be managed during the acquisition process. They concluded that the twelve risk constructs they developed reflected the management teams' perception of which risk areas were important for their acquisitions. They also concluded that this exercise would be more valuable if used as part of the acquisition process rather than to review past acquisitions.

Alaranta and Mathiassen (2011) developed a risk management framework for IS integration in the post-merger phase that involved a four step process:

1) *characterizing* the situation by evaluating the likelihood that identified risks may present themselves,

2) *analyzing* the risks by using the management teams' perceptions of the degree of risk presented by each risk item to develop a risk profile,

3) *prioritizing* the resolution actions to be taken based on the risk profile, and

4) *taking action* by revising the integration plan based on the results of the previous steps in the risk management process.

RESEARCH DESIGN AND METHODOLOGY

This study sought to develop a risk management framework for use in the post-selection phase of mergers and acquisitions. We first conducted a systematic literature review to determine the risks and risk resolutions suggested for the M&A area. Next we synthesized the risks and risk resolutions into twelve risk areas and twelve risk resolution areas. We then interviewed M&A practitioners to validate the risks and risk resolution constructs. Our next step as to develop a risk management framework based on the constructs. Finally, we evaluated the framework by applying it using published case studies. Table 3 summarizes the research process we used to develop and evaluate the framework.

Table 3 – Research Path to Develop and Evaluate Risk Management Framework

Stage	Dissertation Section	Description of Stage	Research Technique
1	Chapter V	Synthesizing Risks and Risk Resolutions	Literature Review
2	Chapter VI	Evaluating Constructs	Interviews
3	Chapter VII	Developing Risk Management Framework	Analysis
4	Chapter VIII	Evaluating Framework	Case Study Analysis

IV.I Literature Review

We conducted a literature review to determine what risks and risk resolution techniques have been identified in the literature. We also determined how risks and risk resolution techniques are currently linked in the literature. We did this by conducting a systematic review of the literature based on concepts (Webster and Watson, 2002). Literature reviews have been used extensively in management and M&A-related research. For example, Haleblian, Devers, McNamara et al. (2009) conducted a literature review of the M&A field. In addition to the

M&A articles they examined, they took note of twelve additional literature reviews which, while primarily focused on other subjects, included M&A as a facet of the review.

IV.I.i Identifying the literature. We designed the initial computer-based search to screen broadly in order to decrease the likelihood that relevant articles would be missed. We then found the relevant articles by reviewing the screened articles. Following the search strategy suggested by Tranfield, Denyer and Smart (2003), we identified keywords and search terms, determined the appropriate search strings, reported the search strategy in enough detail to allow replication, and developed a full listing of the papers produced by the search. The keywords chosen were “acquisition”, “merger”, “process”, “performance” and “risk.” The search terms chosen were words beginning with either “acquisition” or “merger”, so documents containing the plural acquisitions and mergers were also selected. If any of the words “process”, “performance” or “risk” were found in addition to the “acquisition” or “merger” the article was selected in the initial pass.

Our search consisted of all journals in the Web of Science database from 1992 through 2011 in the business, management, organizational change and related fields. As such, the search was not limited to the top journals. The search was conducted in the Title, Abstract, and Keywords fields of the articles. This initial search yielded 2,865 articles. The search parameters and logic for the keywords and Web of Science categories are listed in Table 4.

Table 4 – Search Terms, Parameters and Logic

Initial search to yield 2,865 articles: 1.Topic=(merger* AND risk*) OR Topic=(acquisition* AND risk*) OR Topic=(merger* AND performance) OR Topic=(acquisition* AND performance) OR Topic=(merger* AND process) OR Topic=(acquisition* AND process) 2. Excluded non-business topics by specifically including only: Web of Science Categories=(COMPUTER SCIENCE SOFTWARE ENGINEERING OR MANAGEMENT OR BUSINESS OR ECONOMICS OR BUSINESS FINANCE) AND Web of Science Categories=(MANAGEMENT OR BUSINESS OR ECONOMICS OR BUSINESS FINANCE OR COMPUTER SCIENCE SOFTWARE ENGINEERING OR OPERATIONS RESEARCH MANAGEMENT SCIENCE OR INDUSTRIAL RELATIONS LABOR OR COMPUTER SCIENCE INFORMATION SYSTEMS) AND Subject Areas=(BUSINESS ECONOMICS OR COMPUTER SCIENCE OR OPERATIONS RESEARCH MANAGEMENT SCIENCE OR ENGINEERING OR PSYCHOLOGY) AND Document Type=(ARTICLE OR PROCEEDINGS PAPER) Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1992-2011

The titles of the 2,865 articles were then reviewed for their relevance to: 1) mergers and acquisitions; 2) risk and risk management; and 3) to the post-selection phase of M&A. This review is listed as Step B in Table 35 below. Because of the broad keyword search initially conducted and the many subject areas included, the titles of many articles indicated they clearly fell outside the scope of this review. For example, articles titled “Small business credit scoring” (Berger and Frame, 2007) and “Multiscale neurofuzzy models for forecasting in time series databases” (Kumar, Agrawal and Joshi, 2007) were both identified in the initial search, but examination of the titles quickly revealed that they should be removed from the review.

When examination of the title was not conclusive, the article abstracts were also reviewed. The title and abstract reviews reduced the possibly relevant articles to 177. We did not exclude articles based on their research methodology or design. A further analysis by reading the 177 articles and applying the three criteria resulted in 123 articles of interest (Step C). We then sought to capture potentially important additional articles not previously uncovered, including those published before 1992. To do so, we reviewed the citations of the 123 articles resulting from Step B and evaluated any which were cited by ten or more of the 123 articles. We used the same criteria as when we evaluated the original 2,865 articles. This added an additional

14 articles (Step D). Finally, 12 articles previously not evaluated were added as a result of a review of articles encountered while conducting this research (Step E). In total, 149 articles contributed one or more risks or risk resolutions. The 149 resources used are listed in Appendix A.

Table 5 – Literature Selection Process

Process Step	Step description	Change in number of articles	Net articles
A	Web of Science key word search	2,865	2,865
B	Title and abstract reviewed to determine potentially relevant articles	(2,688)	177
C	Reviewed articles for risk or risk resolutions	(54)	123
D	Reviewed 29 articles referenced by ten or more of the 177 articles resulting from Step B	14	137
E	Added articles found with relevant risks or resolutions	12	149

This search process had several limitations. The Web of Science does not index every published research article or journal and does not cover articles published prior to 1992. Other combinations of keywords may have cast a wider net and yielded additional relevant articles. However, as discussed later, the articles chosen captured almost all of the risks and resolutions offered by the practitioners interviewed for this study, which provides some comfort that the literature search yielded appropriate results.

IV.I.ii Identifying risks and risk resolutions. We reviewed the 149 selected articles for risks and risk resolutions in the post-selection phase of mergers and listed those risks. Our coding of each document started with any mention of risks which could impact M&A success. We then confirmed that the risk was relevant to the post-selection phase of the M&A process. We also looked for risk resolutions, and where the authors provided actions that could be considered a risk resolution, those suggested resolutions were listed next to the risks. We linked

risks and risk resolutions when an explicit link was proposed by the article's author. When the author did not link a risk resolution to a particular risk, we linked them based on our evaluation of the similarity of the situations described by the authors. In reviewing the literature we were able to use our experience in mergers and acquisitions to aid in risk and risk resolution identification and avoid off-topic articles and concepts.

It is possible that we failed to identify some of the risks and resolutions contained in the reviewed literature. However, given the numerous times most of the risks and risk resolutions were mentioned in the literature, we should have found any missed risks and risk resolutions elsewhere in our literature review. In that event, finding an additional occurrence of a risk or risk resolution would likely not have changed our compilation or synthesis of risks and risk resolutions.

IV.II Interviews

To determine if the risks and risk resolutions we derived from the literature were complete, we conducted semi-structured, focused interviews with five experienced M&A participants. Our interviews followed the Merton and Kendall (1946) focused interview outline in that:

1) Our interviewees were "known to have been involved" (p. 541) in M&A situations,

2) Through our literature review, we had "previously analyzed" (p. 541) the situation. In their outline, Merton and Kendall (1946) suggest that the interviewer should have analyzed "significant elements" of the situation prior to conducting the interviews. We did this through our literature review and classification process.

3) We prepared an interview guide based on our literature review,

4) The interview focused on the experiences of the interviewee to both test our previous conclusions and to "ascertain unanticipated responses" (p. 541), which in our case would be risks and risk resolutions we had not previously uncovered.

IV.II.i Interview procedure. We asked the interviewees to discuss the risks they have encountered in M&A and the risk resolutions that were most important for their companies. We did not initially share the risks and resolutions from the literature with the interviewees in order to record their impressions without influence from our literature review.

Interviewees were asked what risks they believe threatened or, if ignored, could have threatened the success of mergers they have managed. We inquired about mergers which failed or did not live up to expectations. We sought reasons for the underperformance and we asked them what resolutions they have used to mitigate or resolve these risks**.** Only then did we ask them to comment on the list of risks and resolutions we had derived from the literature. See Appendix D for examples of interview questions. These interviews lasted for one to two hours. They were recorded and transcribed.

IV.II.ii Interviewees. The interviews were used to determine if the risks and risk resolutions obtained from the literature review have been experienced by M&A practitioners. We interviewed five practitioners who have been responsible for M&A transactions at a senior level. All interviewees have led management teams in M&A transactions in which significant integration of the acquirer and acquiree was planned. All of the interviewees are currently involved with companies who participate in M&A. We selected interviewees with significant experience who would be likely to be able to recall risks and resolutions from numerous M&A situations in which they had been involved. We believe this provided us with a substantial review of our risks and resolutions, evidenced by the significant overlap between their unprompted

identification of risks and resolutions and those from the literature. We did not attempt to provide a statistically significant sample of interviewees. Table 6 provides further details about the interviewees.

Table 6 – Interviewee Summary

ID	Title	Years of M&A Experience	Type of Firm	Nature of experience
A	Chief Financial Officer	10+	Distribution company	Led deal team while company sold to publicly traded company. Led deal team while numerous acquisitions made.
B	Partner	20+	Management Consulting	Senior manager at manufacturing companies involved in M&A transactions.
C	Managing Director	15+	Private Equity and Investment Banking	Senior manager and deal team leader of several companies both as acquirer and acquiree.
D	Managing Director	15+	Private Equity Firm	Led deal team or assisted in acquisitions or divestitures of over a dozen companies.
E	Partner	10+	Retailer, Distribution company and Investment Banking	Integration Manager for numerous acquisitions.

IV.III Case Study Reviews

We reviewed four published case studies to evaluate the results of our literature review, interviews, and synthesis of risks and risk resolution categories. Although we did not conduct the case studies ourselves, in our review of the case studies we followed the principles of case study data collection from Yin (2009, p. 114-122):

1) Our use of the case studies in addition to the literature and interviews constitutes a use of multiple sources of evidence,

2) We created a case study database to organize the data we collected from the case studies, and

3) We have maintained a chain of evidence to allow observers to trace our evidence.

IV.III.i. Case studies. Given that this engaged scholarship research provides a framework to help solve a problem faced by practitioners, we evaluated the framework using case studies which featured actual, identified M&A transactions. To select the case studies we searched Ivey's database of publications. From the initial database of 5,886 in October, 2012, we eliminated those that were not written in English or were reports or articles and not cases (Steps B and C in Table 7 below). Of the 3,754 cases, we searched those with "Merger and Acquisition Themes" and that mentioned the word "integration" (Steps D and E). Twenty-six cases met these criteria. Given almost all of our interviews with practitioners concerned M&A situations where at least one of the parties was North American, we chose to limit the possible cases to those categorized by Ivey as "North American and Caribbean." Of the sixteen remaining cases, we eliminated eleven as inappropriate based on either their narrow focus (accounting aspects of a merger, IT integration), insufficient information in the case on which to conduct an analysis, or because the case did not focus on the post-selection phase. We chose four of the five remaining cases based on their focus on the post-selection phase and the amount of information concerning integration-related issues they provided. The steps of the process are summarized in Table 7 below:

Table 7 – Case Search Terms and Parameters

Process Step	Step description	Change in number of publications	Net articles
A	All Ivey Publishing Publications	5,886	5,886
B	English language only	(996)	4,890
C	Selected "Cases" only	(1,136)	3,754
D	With M&A Themes	(3,653)	101
E	Keyword search "Integration"	(75)	26
F	Chose North America and Caribbean articles	(10)	16
G	Reviewed to eliminate inappropriate cases	(11)	5
H	Selected cases with rich detail, focus on post-selection phase	(1)	4

We evaluated the framework by looking at four case studies of companies developing their integration strategies for a proposed merger. We compared the risks presented in the cases with the risk areas in the framework. We then compared the risk resolution strategies contemplated by the managers in the profiled companies with those developed for our framework. We sought to determine if the risks and risk resolutions and the framework we developed might have been useful in the risk management process of the M&As presented in the cases.

IV.III.ii Case descriptions. Table 8 provides a summary of each of the four cases used to evaluate the framework.

Table 8 – Case Descriptions

Case	Industry	Size	Description	Reference
Bombardier	Rail car manufacturing	Bombardier revenue $3.45B Cdn	Bombardier (Canada) purchased AdTranz (Germany) to expand geographic scope, increase its competencies in some technical areas and complete its product portfolio.	Merrison and Barnett, 2004
Deloitte	Accounting services	Arthur Andersen billings estimated $100Cdn to $180 Cdn, combined entities about Cdn $1.1 billion.	Deloitte (Canada) absorbed Arthur Andersen (Canada) after AA's dissolution as a result of the Enron scandal.	Seijts and Monk, 2004
Dow	Specialty chemicals	Dow revenue $49 billion, Dow acquiring unit had $650 million sales, Wolff unit had $500 million sales.	Dow (U.S. based) acquired Wolff Walsrode (Germany) in 2007 to add to Dow's cellulosic unit and strengthen its footprint in Central and Eastern Europe	Heimeriks and Gate, 2010
Unity	Stockholder transfer agency services	Unity had $2B in sales	Unity, (South Africa), purchased Delta (United States). The objective of the acquisition was to achieve gains through synergies, economies of scale, financial and marketing advantages, revenue diversification and reduced earnings volatility. Integration of the two firms' numerous information systems was seen as a crucial part of the merger, but was a concern due to the many systems used by the two companies and the lack of compatibility of the systems.	Haggerty and Fong, 2009

SYNTHESIZING RISKS AND RISK RESOLUTIONS

To synthesize the risks and risk resolutions into risk categories, we identified the risks and risk resolutions in the literature, categorized the identified risks and risk resolution techniques, and linked the risk resolution techniques to the risk categories.

V.I Conceptualizing Risks

We conceptualized risks using Pettigrew's content, context and process categorizations (Pettigrew, 1987). We considered risk as per Charette (1990) where risk is considered to be present only when: the potential for loss exists; uncertainty with respect to the eventual outcome is present; and some choice or decision is required to deal with the uncertainty and potential for loss.

Using Pettigrew's method of analyzing organizational change by first dividing the areas to be investigated into categories of content, context and process of change, we categorized risk in the M&A process into those three areas.

1) *Context* refers to the internal and external environment in which the firm operates, and could also be considered the "why" of change.

2) *Content* refers to the area of the firm being examined, such as corporate culture, marketing or technical or functional areas. The "what" of change is addressed in the content area.

3) *Process* refers to the activity the firm is conducting to effect the change, which in this research is the merger process. Pettigrew considered process the "how" of change (Pettigrew, 1987).

Pettigrew's framework was developed for the analysis of the "transformation of the firm" (Pettigrew, 1987 p. 658) including mergers. It has been successfully used to categorize risk areas

in post-merger integration (Alaranta and Mathiassen, 2011) , and fits well the task of categorizing process risks in M&A. The following discusses the risks we found in more detail, conceptualized using Pettigrew's categorizations, and synthesized into risk areas:

V.I.i Content risks.

1.1 Systems Compatibility Risk

A merger may require the integration of numerous systems. It is not surprising that two firms, having spent years developing their own operating policies, employee compensation schemes, and bricks and mortar facilities, would have developed management systems which are incompatible and difficult to combine. The potential inefficiencies arising from the process of combining them can create systems compatibility risk. These risks can be in areas as disparate as the factory floor (Zhang, Fleet, Shi et al., 2010), information systems (Stylianou, Jeffries and Robbins, 1996), the technology assets expected to contribute most to the value to be derived from the merger (James, Georghiou and Metcalfe, 1998) and R&D synergies (Slowinski, Rafii, Tao et al., 2002).

1.2 Integration Bias Risk

This risk results when one of the merger partners dominates the integration decisions, or when one functional area exercises domination. Examples of this risk include integration decisions made under the influence of hubris (Colombo, Conca, Buongiorno et al., 2007; James, Georghiou and Metcalfe, 1998), using underqualified consultants (Slowinski, Rafii, Tao et al., 2002) and imposing management systems on the target (Jemison and Sitkin, 1986). Integration bias can also exacerbate systems compatibility risk, for example, when the acquirer assumes its management systems are superior and that the fault for the inefficiency or difficulty in combining them lies with the inferior target company (James, Georghiou and Metcalfe, 1998).

1.3 Organizational Culture Risk

The common assumptions held by a group, which help make up its organizational culture, can lead to "…meaning, stability and comfort; the anxiety that results from the inability to understand or predict events happening around the group is reduced" (Schein, 1990 p. 111). But when an organization's culture is upset, it may not be surprising for the corporate environment to change. And in fact the maladies attributed to organizational culture differences include shock (Bastien, Hostager and Miles, 1996), stress (Weber, Tarba and Bachar, 2011), and alienation and disconnectedness (Brannen and Peterson, 2009). Even when merging firms occupy similar positions in the same industry, such as professional service firms (Ashkanasy and Holmes, 1995), or have the same position in the supply chain, as with merging retailers or manufacturers, organizational culture risks can abound. Clashes can occur when the target employees fail to accept the acquirer culture (Pioch, 2007) or actively resist it (Gates and Very, 2003).

1.4 National Culture Risk

Differences in the national cultures of two merging firms have been blamed for a variety of suboptimal merger results. The risks from national culture differences can cause problems when a common language is adopted for the combined companies and those who don't speak the chosen language well are disadvantaged (Piekkari, Vaara, Tienari et al., 2005). Language difficulties can also lead to communication failures due to nuances in linguistic patterns which go unappreciated (Irrmann, 2005). In addition to language-related difficulties, national culture differences can impede learning (Reus and Lamont, 2009), create difficulty regarding compensation issues (Tetenbaum, 1999) and cause socio-cultural differences to cause issues

other than integration to take priority (Maire and Collerette, 2011). Table 9 details the Content Risk Areas, Definitions and references selected literature support for the risks.

Table 9 – Summary of Content Risks by Category

Risk #	*Risk Name*	*Risk Definition*	*Literature Support*
1.1	Systems Compatibility Risk	Merging firms have practices, systems, reward systems or operating policies which are so incompatible integration problems are created.	Failure to realize value from technology assets (130) Consolidation impacts factory efficiency (147) IS merger process not smooth (127) Functional integration is disruptive (121)
1.2	Integration Bias Risk	Integration decisions are dominated by one party or by limited business, technical or functional areas.	Acquirer hubris (37,72,98,83) Management system misapplication (73) Overuse of underqualified consultants (123) Acquirer doesn't value acquiree processes and systems (97) Focus on cost synergies at expense of HR IT systems (23)
1.3	Organizational Culture Risk	Merger process or integration is hampered or resisted due to differences in corporate cultures.	Corporate Cultural Clashes (20,24) Lack of acceptance of corporate culture by acquired company employees (108) Firms risk propensity profiles are different (105)
1.4	National Culture Risk	Merger process or integration is negatively impacted by differences in nationalities, language or culture.	National culture differences (1,98,115) National cultural differences are tacit (99) Cultural mismatches individualism v. collectivism (27)

Numbers in parentheses reference articles in Appendix A

V.I.ii. Context risks.

2.1 Customer Relationship Risk

A context risk that may be faced by merging companies is one which relates to their relationships with their customers. The company faces the risk that relationships with customers will deteriorate due to unanswered customer concerns about the impact of the merger (Anderson, Havila and Salmi, 2001; Burgelman and McKinney, 2006), customer alienation (Bastien, Hostager and Miles, 1996), and the departure of key employees who maintain customer

relationships (Zhang, Fleet, Shi et al., 2010). The integration process can also cause new product launches to be delayed (Graebner, 2004), which can create customer uncertainty (Homburg and Bucerius, 2005).

2.2 Contextual Ignorance Risk

Contextual ignorance can be a risk when the circumstances outside the company are not adequately understood by the merger partners, or insufficiently attended to during the merger process. While it is usually not advisable for a company to ignore the context in which it operates as it conducts its everyday business, to do so while undergoing the significant organizational change which may accompany a merger can be even more risky. Contextual ignorance can lead to a failure to anticipate and counter competitors' reactions to the merger (Gates and Very, 2003), a belated realization that the merged company will not have a competitive cost structure (Cullinan, Le Roux and Weddigen, 2004), or a failure to take advantage of growth opportunities (Chatzkel and Saint-Onge, 2007).

2.3 Adverse Behavior Risk

Adverse behavior risk refers to employee behavior that negatively impacts company performance. This behavior can take the form of the top management team or other key employees leaving as a result of the merger (Napier, 1989; (Schweiger, Ivancevich and Power, 1987; (Vermeulen, 2005). The employees who remain may resist the merger and the change it brings (Giessner, 2011), become disaffected (Chun and Davies, 2010), or allocate their efforts to seeking benefits for themselves, a practice known as rent-seeking (Meyer, 2008). Innovation can be hurt if technical employees are not managed properly (Kreiner and Lee, 2000) or leave the firm (James, Georghiou and Metcalfe, 1998).

2.4 External Stakeholder Risk

External stakeholder risks can be of concern when outside stakeholders do not support, understand or collaborate with the merger process. Instances when this can create difficulties include union relationships which negatively impact performance (Antila, 2006) and stakeholders who do not believe or understand the reasons for the merger (Vaara and Monin, 2010).

Table 10 – Summary of Context Risks by Category

Risk #	*Risk Name*	*Risk Definition*	*Literature Support*
2.1	Customer Relationships Risk	Customer relationships are negatively impacted by the merger.	Customers and suppliers concerned about merger (7) Customer uncertainty (68) New product launch delays (58) Customer alienation (20)
2.2	Contextual Ignorance Risk	Contexts outside the company are not adequately understood or are insufficiently attended to during the merger process.	Competitor reactions (18,55) Business environment changes negatively (30) Existing relationships can't be changed (51) Emphasis on cost savings leads to ignoring or eliminating opportunities for growth (38)
2.3	Adverse Behavior Risk	Employee behavior due to the merger process negatively impacts company performance during and after the merger process.	Merger syndrome causes negative employee reactions (28) Loss of talent (23) Disaffected group of employees (41) Merger survivors coping difficulty (53) Reallocated effort to rent-seeking (95)
2.4	External Stakeholder Risk	Outside stakeholders do not support, understand or collaborate with the process.	Competitor reactions during our merger (20) Union relationships negatively impact performance (9)

	Acquirer team perceived by acquired e/e to lack authority (50) Uncooperative target management during due diligence (45)

V.I.iii Process risks.

3.1 Process Management Risk

Mergers requiring integration undergo some formal or informal process to combine the two companies. Inadequate management of this merger process, or process management risk, is the focus of many analyses in the literature. This risk encompasses a wide variety of management sins which can lead to merger process problems ranging from inefficiencies to failure. Risk arises when employees allocate too much time to the post-merger integration process (Meyer, 2008) or the merger process disrupts the normal work cycle or occurs during the busy season (Greenwood, Hinings and Brown, 1994). Diversion of management attention can retard post-acquisition growth (Wiklund and Shepherd, 2009) or detract from the company's emphasis on its core mission (Yu, Engleman and Van de Ven, 2005). Poor integration performance can be the result of a failure to consistently and actively manage the integration process (Bannert and Tschirky, 2004; Ashkenas and Francis, 2000) as well as using the wrong integration approach (Al-Laham, Schweizer and Amburgey, 2010). When managers of the process fail to provide sufficient about the tasks at hand and evaluate subordinate performance the process can suffer from "information constipation" (Bastien, Hostager and Miles, 1996 p. 265).

3.2 Integration Timing

Integration timing risks are present when inadequate attention is paid to the timeliness of the planning and implementation of the integration. The importance of proper management of

timing is illustrated by concerns that integration can go too fast when the companies do not know each other well before the merger (Al-Laham, Schweizer and Amburgey, 2010) or teams have not been coached well on how to work together (Miles and Bennett, 2008). Conversely, a slow integration process can exacerbate "merger syndrome," which is a plague of fear and uncertainty among employees of acquired firms (Marks and Mirvis, 1985; Colombo, Conca, Buongiorno et al., 2007). In addition to the risk that the process will go too fast or too slow, mergers can also suffer from inadequate or delayed planning of the process (Ashkanasy and Holmes, 1995; Aiello and Watkins, 2000; Calori, Lubatkin and Very, 1994). Finally, "escalating momentum" can lead to less than adequate consideration of integration issues and premature conclusions (Jemison and Sitkin, 1986).

3.3 Resources Shortfall Risk

During the merger processes, new merger-related tasks are undertaken at both companies. At the same time, many of the routine activities of the firm must continue as before. Some of these ongoing activities are made even more time-consuming and difficult due to the impact of the merger. As a result of this limited slack, there may be too little management talent for the integration tasks (Kitching, 1967) or the integration team may be too small (Vester, 2002). Resources shortfall risk can also manifest themselves as task overload (Bastien, Hostager and Miles, 1996), implementing too many value creating strategies simultaneously (Ambrosini, Bowman and Schoenberg, 2011), or too much integration leading to too little slack (Shaver, 2006). Regardless of how they are characterized, this mismatch between tasks and resources can lead to a failure to achieve economies of scope (Gary, 2005), inhibit knowledge transfer (Azan and Sutter, 2010), or overwhelm the HR function (Vester, 2002).

3.4 Political Escalation Risk

Political escalation risk occurs when significant political struggles develop over which company's management systems to use. Examples of these management systems include processes, practices and computer systems. Political escalation can occur as a result of preference being given to the acquirer's employees (Allred, Boal and Holstein, 2005), when reductions in force are not evaluated as fair (Buono, 2003), or when acquired company managers are given excessive autonomy (Meyer, 2008). It can manifest itself as an integration sabotaged by cliques (Miles and Bennett, 2008), resistance to change (Lupina-Wegener, Schneider and van Dick, 2011; Vaara, 2003) or destructive effects on the integration process (Weber, 1996).

Table 11 – Summary of Process Risks by Category

Process Risks			
Risk #	***Risk Name***	***Risk Definition***	***Literature Support***
3.1	Process Management Risk	Inadequate management action or leadership of the merger process leads to a significant departure from merger goals.	Failure to plan for integration during due diligence period (2) Due diligence lack of detail (2) Escalating commitment or overcommitment (65) Wrong integration approach (4) Integration process difficult (137)
3.2	Integration Timing Risk	Timeliness of the planning for and implementation of the integration is inadequate.	Escalating momentum leads to premature conclusions (73) Speed of integration too fast (4,10) Integration slow and costly (12) Integration process stalled (114) Delayed Integration Planning (32)
3.3	Resources Shortfall Risk	There is insufficient slack, resources or skills to properly prosecute the integration program or realize expected benefits of the merger	Overintegration leads to too little slack (119) Insufficient size of integration team (138) Task overload (20) Too little management talent for integration task (74)

3.4	Political Escalation Risk	Political struggles over which company's management systems to use	Excessive autonomy - acquired managers fight to retain independence (95) Lack of common purpose between acquirer and acquiree (92) Integration sabotaged by cliques (98) Not-invented here syndrome (138) Preference given to acquirer company employees (5)

V.II Conceptualizing Risk Resolution Techniques

Risk resolution techniques were mentioned over four hundred times in the reviewed literature, counting duplicate mentions of the same or similar techniques in different sources. The following sections present a summary of the risk resolution techniques using the Content, Context and Process categories.

V.II.i Content. Risk resolutions related to content risks are focused mostly on what should be done during the merger process. The resolution strategies are to: analyze and design systems early; adopt a systematic evaluation process; plan and cultivate collaboration; and manage cultural diversity. For many companies, a merger is an unusual event, so the planning and control mechanisms routinely used within the company for their business may not be relevant. To counteract this, several of the risk resolution techniques proposed for content-related risks call for developing a program designed on a case-specific basis to address the risks (Slowinski, Rafii, Tao et al., 2002; Colombo, Conca, Buongiorno et al., 2007), developing an integration tracking process (Gates and Very, 2003) and carefully codify the process (Zollo and Singh, 2004; Zollo, 2009).

All four of the content risks have at least one resolution action advising that managers should be involved earlier in the process, such as the R&D manager for technical acquisitions (Slowinski, Rafii, Tao et al., 2002), IS personnel in pre-merger planning (Stylianou, Jeffries and Robbins,

1996), operating managers on the integration team (Marks and Mirvis, 2001), and HR managers involved early (Tetenbaum, 1999).

V.II.ii Context. One set of resolution techniques for context risks encourages early engagement with important constituencies such as employees with key customer relationships, customers, competitors, suppliers and unions (Zhang, Fleet, Shi et al., 2010; James, Georghiou and Metcalfe, 1998; Slowinski, Rafii, Tao et al., 2002; Antila, 2006). The form and substance of communications are also addressed, as with advice to communicate the purpose of the merger frequently (Pablo, 1994), to vary communications strategies for certain constituencies (Chun and Davies, 2010), for managers to tell the truth (Schweiger, Ivancevich and Power, 1987), and to consider these communications to be on ongoing process and not a one-time event (Vaara and Monin, 2010).

V.II.iii Process. The resolutions for the process risk category highlighted the importance of the integration and leadership teams, including their role, composition, and the timing of their formation and dissolution. These resolutions suggest the appointment of an integration manager as well as a dedicated merger integration team or mini-integration teams (Ashkenas and Francis, 2000; Vester, 2002). The integration team should include key employees of the target (Raukko, 2009), including additional human resources staff (Vester, 2002). A strategic leadership team should be appointed immediately and integration teams should be maintained well after the merger date (Burgelman and McKinney, 2006). The integration process should be systematic (Shrivastava, 1986) and a merger intent document should be prepared which outlines expectations and holds people accountable (Ashkenas, Francis and Heinick, 2011).

V.III Risks and Risk Resolution Techniques Linked

We linked resolution techniques from the literature to the risk factors. We first looked for resolutions that were linked to specific risks in the literature, and used these linkages when they were found. When a resolution was listed without explicitly naming the accompanying risk, we linked to the risk which through intuition we understood the author was referring. Table 12 provides the resolution strategies for each risk area as well as exemplary actions which the literature recommends as risk resolutions. The numbers in parentheses in the Exemplar Actions column reference the literature from which each action was derived via reference to Appendix A.

Table 12 – Risk Resolution Strategies and Exemplar Actions

Risk #	Risk Name	Resolution Strategy	Exemplar Actions
	Content Risks		
1.1	Systems Compatibility	Analyze and design systems early	Deliberate codification of the process (149) Integration manager respects acquiree talent and assets (130) Evaluate target technology portfolio with same tools used to manage acquirer's systems (123) Evaluate degree of integration desired carefully Involve R&D manager early in planning for technical acquisitions (123) Include IS personnel in pre-merger planning (127)
1.2	Integration Bias	Adopt systematic evaluation process	Consider implications of both companies' technologies (72) Evaluate "treasured assets" of target (98) Provide target with some autonomy (97) Empower target managers (42) Be aware of mindset of target ((92) Operating managers on integration team (92) Adjust integration process on case-by-case basis (43) Insist that consultants have hands on experience and knowhow (123)
1.3	Organizational Culture	Plan and cultivate collaboration	Increase interdependence and connectivity among employees (82) Create tasks on which members from both companies can collaborate(141) Encourage employees to develop informal ties

			and social relationships (115) Involve employees in managing process (140) Develop integration tracking process. (55). Make overall appointments and other choices equally, demonstrate integrative equality (47) Increase autonomy of HR managers (143) Celebrate small victories (140) Senior managers actively communicate their values, beliefs and norms to staff (123)
1.4	National Culture	Manage national cultural diversity	Acknowledge differences, adequate distribution of tasks, mutual respect (17) Have cultural integration program involving interaction and working together on projects (123) Provide cultural training to staff of both companies(123) Assign managers from target to home office (12) Recognize that national culture differences lead to communication failures (71) Reinforce integrative roles to bridge cultural gaps (hire consultants or assign task forces) (136) Acquirer exerts less formal control, develop informal control and coordination (32) Managers' opinions as to integration process obtained during process (99) Conduct cultural audit of target (131) Senior HR leader and Integration Manager involved early (131)
	Context Risks		
2.1	Customer Relationship	Implement strategies to maintain marketing momentum	Develop strategy before execution of integration (30) Develop integration tracking process (55) Evaluate brand equity decisions as part of merger process (79) Retain key employees who maintain customer relationships (147) Include customers in the process (20) Speedy integration of market-related aspects of merger (68) Delay post-merger integration until after product launch (59)
2.2	Contextual Ignorance	Engage and inform key stakeholders	Revise plan and stakeholder expectations (30) Develop integration tracking process to include competitor reactions (55) Use secondary sources (suppliers, customers, former employees) to evaluate target technology (72)

2.3	Adverse Behavior	Aggressively manage employee relations	Communicate purpose of merger and merger plan early and often (104) Vary communication and integration strategies for physically remote employees (41) Don't marginalize target employees (5) Forge social connections between two companies (13) Managers tell the truth and have empathy for employees (118) Provide certainty by eliminating post-merger autonomy of target (85) Choose leaders from both companies (136) Make decisions quickly and fairly (procedural justice) (132) Carefully hire and train integration managers capable of dealing with conflict (42) Grant reasonable autonomy to target firm managers (121) Integrate people before integrating tasks (22) Understand differences in ethical attitudes (Interviewee B)
2.4	External Stakeholder	Mobilize external stakeholders	Proactively work with customers and suppliers (123) Retain key employees who maintain relationships (147) Communications to legitimate merger should be ongoing process, not one-time event (134) Build relationships with unions (9) Avoid long pre-acquisition phase (2) Proactively initiate contact with regulatory agencies (Interviewee A)
	Process Risks		
3.1	Process Management	Continuously plan and reorganize process	Prepare "merger intent" document outlining expectations for the deal and holding people accountable (11) Establish new strategic leadership team immediately (121) Appointment Integration Manager (11) Have dedicated merger integration team (25) Selective participation – not everyone participates in process directly (95) Long term strategy communicated to all organizational members (121) Maintain integration team well after merger date (30) Develop and implement a systemic integration process (16)
3.2	Integration Timing	Monitor and adapt timing	Carefully evaluate combined teams' ability to manage pace of change (98)

			Integrate at proper speed (4) Exploit negotiation phase to increase knowledge base and plan integration activities (43) Manage employee expectations of pace of change (11) Key target employees should have significant role in integration (111) Develop standards as to how teams will work together (98)
3.3	Resources Shortfall	Ensure and monitor appropriate resources	Transfer more resources to effort (97) Plan for maintaining organizational slack (54) Maintain more resources after integration (119) Create mini-integration teams (138) Bring in additional HR staff to help with merger process (138) Embark on projects appropriate for new scale (14)
3.4	Political Escalation	Implement processes for conflict resolution	Base choices of management on competence criteria (95) Predetermine positions during pre-merger phase (95) Have resolution mechanisms in place (95) Manage conflict constructively from very beginning (98) Develop short term goals which require entire team to work together (98)

EVALUATING CONSTRUCTS

We evaluated the risk and risk resolution lists and our constructs of twelve risk areas and twelve risk resolutions by interviewing M&A practitioners. Our goal was to determine if the risks and resolutions detailed by the interviewees without prompting of the risks and resolutions we had synthesized from the literature would be consistent with our risk and resolution lists and our categorization of them.

The risks and risk resolutions described in the literature were generally consistent with those mentioned by the interviewees. Every risk factor we synthesized from the literature was mentioned unprompted by at least one of the interviewees. And, with few exceptions, all of the risks the interviewees mentioned were included in the risk factors we derived from the literature. Table 13 below details the number of risks and risk resolutions mentioned by interviewees.

Table 13 – Interview Risks and Risk Resolutions Matched to Literature

Risk #	Risk Name	Risks	Resolutions
1.1	Systems Compatibility	1	2
1.2	Integration Bias	2	3
1.3	Organizational Culture	3	2
1.4	National Culture	1	0
2.1	Customer Relationship	4	4
2.2	Contextual Ignorance	3	2
2.3	Adverse Behavior	4	4
2.4	External Stakeholder	2	2
3.1	Process Management	3	4
3.2	Integration Timing	3	3
3.3	Resources Shortfall	4	4
3.4	Political Escalation	2	2
Other		2	2

The importance of the category adverse behavior was evident in the frequency with which it was mentioned in the interviews and the literature. The interviewees demonstrated a concern and empathy for the employees, as when Interviewee A noted "[acquired employees] are always scared of what you are going to bring them." Interviewee B offered as a resolution to Adverse Behavior of acquirer that "you [owners] might want to bonus your guys [management], because they know you are making a ton of money."

One risk mentioned by interviewees but which was difficult to categorize in our risk list from the literature was the risk created by differences in ethics among the participants.

Interviewee E commented that by being honest and truthful in dealing with employees of the acquired company "it is amazing what you can accomplish even in a difficult environment." Interviewee B described a selling shareholder's failure to reward key employees of the acquired company. He identified this as an ethics failure which created risks for the integration of the companies. We have categorized these two comments in the "Other" category in Table 7. We would categorize this as an Adverse Behavior Risk on the assumption that these ethical failures increased the risk that employees would exhibit adverse behavior. It is possible that these examples from the interviewees could be categorized as differences in organizational culture, but we felt that Adverse Behavior was the best fit.

One of the exemplar risk resolutions from the literature which we categorized as an Adverse Behavior resolution was that managers tell the truth and have empathy for employees (Schweiger, Ivancevich and Power, 1987). This may serve as a risk resolution in this case of management not being honest or truthful, or if management does not having the empathy to understand that the owner's good fortune in selling his company may cause resentment among employees if it is not shared.

Another risk mentioned by interviewees which was not in the literature was government regulations or regulatory issues. Interviewee A's company is highly regulated. Obtaining government licensing approvals and transfers is a requirement for them to complete any acquisition. They resolve this issue by keeping an attorney on retainer who alerts them to any concerns while they are considering a merger, and promptly initiates filings to regulatory agencies during the merger process. To reflect these interviewee comments, we added the risk resolution exemplar "Proactively initiate contact with regulatory agencies (Interviewee A)" under 2.4 Mobilize External Stakeholders in Table 8.

Neither the interviewees nor the literature provided resolutions for every risk. For example, Yu, Engleman and Van de Ven (2005) described several risks in an M&A integration resulting from the diversion of management attention, but did not proscribe a resolution to focus management's attention. In many cases the resolutions were implicit, as when Interviewee B described the risk of an acquirer's failure to have an integration plan. The resolution was unstated but clearly it is to have an integration plan.

All of the risks mentioned in the literature were mentioned unprompted by the interviewees. Only one risk mentioned by the interviewees, the risk of government regulation, did not appear in our literature review, and we have added it to the risk area External Stakeholder Risk. All of the resolution areas we derived from the literature were mentioned by the interviewees except National Culture. Conversely, almost all of the resolutions mentioned by the interviewees were available in the literature. This evaluation provides some comfort that the literature review resulted in determining the risks practitioners face in the post-selection phase of mergers and acquisitions.

DEVELOPING THE RISK MANAGEMENT FRAMEWORK

We developed a risk management framework for M&A by identifying the risks and risk resolutions inherent in the practice of M&A and in the literature and synthesizing the risks and risk resolutions into twelve risk factors under three categories. We then linked the risk factors and risk resolutions, using a risk-action list as developed by Boehm (Boehm, 1991). Next we developed the framework for use in the risk management process.

VII.I Framework Design

We developed the framework by following Boehm's outline for the practice of risk management (Boehm, 1991). Under the first category, risk assessment, one conducts the steps of risk identification, risk analysis and risk prioritization. The second category, risk control, involves the steps of risk management planning, risk resolution and risk monitoring. Our framework will incorporate the first four steps, including the risk management planning process, where it can then be incorporated into a company's M&A integration management plan for use in the ongoing M&A process.

Boehm's software risk management techniques are suitable for use here, as software projects have some similarities to the M&A process. The software project risks mentioned by Boehm all have corresponding risks in the M&A arena. The software project risks Boehm mentions are the frequency of software-project disasters, the possibility of avoiding those disasters with early identification and resolution of high-risk items, and the enthusiasm which carries a project forward despite the failure to attend to the high-risk items. M&A and software projects also share possible involvement with multiple functional areas of a company, are often complicated to administer, and are subject to time pressures and limitations. Both mergers and

large-scale software projects are infrequent events compared to the day-to-day management activities of a firm.

We used Boehm's risk-action list, which combines at least one risk resolution action with each risk factor on the list. We chose it because risk-action lists are considered easier to use and modify than risk-strategy models (Persson, Mathiassen, Boeg et al., 2009) and provide more guidance to practitioners than a risk list. Some researchers in the M&A field have followed the risk-action list approach with a limited scope to identify a small list of risk items and resolution actions. For example, Cartwright and Cooper (1996) provided a guide to evaluate corporate cultures and a checklist for use in acquisitions to improve the selection of merger partners and aid in integration planning.

Because the post-selection phase of M&A transactions often takes place within a very limited time and is usually a collaborative process with many participants, the ease of employing a framework is important. The need to employ a framework concurrently by M&A managers who may come from more than one organization and in several functional areas of an organization requires the framework be easy to quickly understand. It is also important to be able to modify a framework to fit an M&A process as it begins, and then to be able to further adjust and modify it as the process develops. The risk-action list fits the criterion of ease of use and modification.

There are numerous approaches to developing risk management frameworks, each with different methods of addressing the elements of risk, resolution and their integration into a framework. Iversen, Mathiassen and Nielsen (2004) identified four approaches in the field of software risk management, including generic risk lists, the risk-action list we have chosen, and two risk-strategy models. We chose not to use the generic risk list because it does not include

risk resolutions, which are an important part of the framework. Practitioners in M&A seek to identify and resolve risks, and the inclusion of risk resolutions in a framework aids in risk resolution.

Iversen, Mathiassen and Nielsen (2004) also identified two risk-strategy frameworks that provide increased strategic oversight capabilities. However, they have limitations that may make them less suitable for the M&A process. The risk-strategy model summarizes numerous relationships based on a limited number of risk categories and resolution categories. The use of the risk-strategy model in the context of an M&A process may lead managers to deemphasize important risks which are part of a risk category that is not emphasized in the selection of a risk profile. And while the risk-strategy analysis approach may retain the granularity of specific risks and resolutions so they can be easily addressed, the benefits of building the framework with a strategic level of analysis may be offset by the added complexity of building the framework.

Following Boehm, we prepared a framework comprised of *risk assessment*, which included risk identification, risk analysis, and risk prioritization, as well as *risk control*, here comprised of risk-management planning. We designed this framework for the M&A process as described below:

i) Risk identification is the first step of risk assessment. During risk identification, the risks we have previously identified are combined with the risks identified by the managers for the specific M&A situation. We identified hundreds of individual risks to the post-selection phase of M&A. Those individual risks were categorized into twelve risk factors, which we grouped into three areas (Content, Context and Process) in accordance with Pettigrew's format (Pettigrew, 1987). We chose the level of detail provided by the twelve risk factors to allow managers using the framework

to discuss the relative importance of the twelve risk factors without formally evaluating all individual risks in the M&A transaction before them.

ii) The second step is risk analysis, which is an assessment of the likelihood of each risk factor negatively impacting the merger, and the magnitude of the impact should it occur. The risk analysis stage is conducted by measuring the risk exposure of each risk factor. The risk exposure is measured by multiplying the probability each identified risk will produce an "unsatisfactory outcome" (Boehm, 1991 p. 33) times the loss if the event associated with the risk occurs. For each risk factor produced in the risk identification stage, the framework users arrive at two numerical ratings, one for its probability and one for impact. We used a scale of one to three for these ratings.

iii) In the risk prioritization stage, participants in an actual M&A situation rank order the risk factors. Users calculate a risk exposure for each risk factor by multiplying the likelihood rating times the probability rating for each risk factor. In addition to the numeric inputs provided independently by project participants, group discussions are held to confirm, clarify and achieve consensus on the rank ordering. This step should be done with a number of participants from the management team to stimulate discussion, provide a thorough analysis of the importance of each risk area in the context of a particular transaction, and improve support for the conclusions reached by the group. We chose to calculate risk exposure at the risk factor level. We believe the twelve risk factors conceptualized in the framework provide an appropriate level of detail for risk management, avoiding the lack of specificity if risk areas such as context, content and process were used instead. Persson (2009) chose to use eight risk areas in prioritizing risk, to avoid the detail of using their 24 risk factors. In Harris (2007), the management

team undertaking a risk management process found twelve risk constructs appropriate for use in describing the riskiness of their acquisitions.

iv) During the *risk control* stage, managers conduct the fourth step of risk management, risk management planning. During risk management planning, users prepare a plan to address the risk factors. The risk exposures calculated in step three and the risk resolution techniques are used to prepare this plan. Participants use risk resolution strategies, modified by the participant's experience and the specific M&A process, to address each risk and develop a plan for addressing the high priority risks. The exemplar actions from the literature provide further guidance by detailing possible actions with which to conduct the resolution strategy. The risk management plans developed for each of the risks are then integrated with each other and with other ongoing functions of the merging companies. An example of this integration would be when contact with customers occurs in the ordinary course of business for the merging companies. The risk management plan may call for increased contact with customers concerning the merger. These increased contacts and ordinary contacts may need to be coordinated to ensure customers receive a consistent message and that it is presented with the desired frequency and style. Finally, the risk management plan is integrated with the overall process guiding the implementation of the merger.

Table 14 is an example of a risk assessment template which could be provided to managers in a merger to evaluate the relative levels of risk faced in a particular situation.

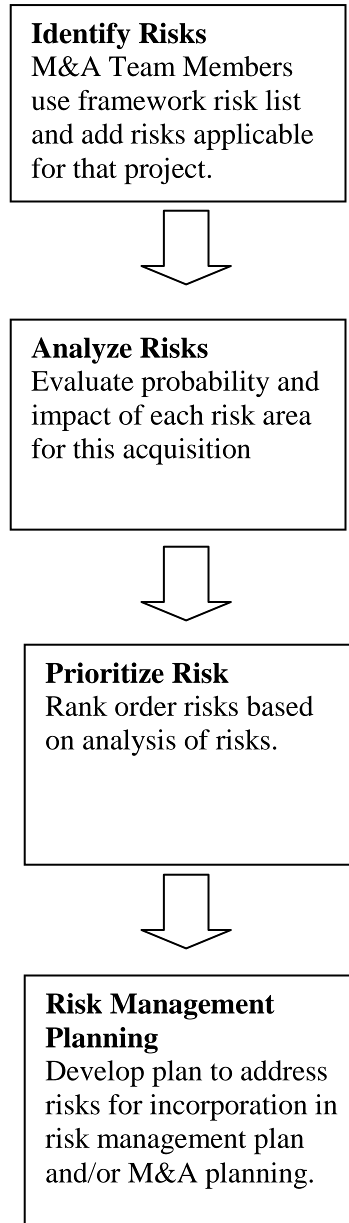
Table 14 – Risk Assessment Template

	Risk Name	*Risk Definition*	*Risk Level*			*Risk Impact*			*Risk Expo-sure*
			L	***M***	***H***	***L***	***M***	***H***	
1.1	Systems Compatibility	Merging firms have practices, systems, reward systems or operating policies which are so incompatible integration problems are created.	___	___	___	___	___	___	___
1.2	Integration Bias	Integration decisions are dominated by one party or by limited business, technical or functional areas.	___	___	___	___	___	___	___
1.3	Organizational Culture	Merger process or integration is hampered or resisted due to differences in corporate cultures.	___	___	___	___	___	___	___
1.4	National Culture	Merger process or integration is negatively impacted by differences in nationalities, language or culture.	___	___	___	___	___	___	___
2.1	Customer Relationships	Customer relationships are negatively impacted by the merger.	___	___	___	___	___	___	___
2.2	Contextual Ignorance	Contexts outside the company are not adequately understood or are insufficiently attended to during the merger process.	___	___	___	___	___	___	___
2.3	Adverse Behavior	Employee behavior due to the merger process negatively impacts company performance during and after the merger process.	___	___	___	___	___	___	___
2.4	External Stakeholder	Outside stakeholders do not support, understand or collaborate with the process.	___	___	___	___	___	___	___
3.1	Process	Inadequate management action							

	Management	or leadership of the merger process leads to a significant departure from merger goals.	___ ___ ___ ___ ___ ___ _____
3.2	Integration Timing	Timeliness of the planning for and implementation of the integration is inadequate.	___ ___ ___ ___ ___ ___ _____
3.3	Resources Shortfall	There is insufficient slack, resources or skills to properly prosecute the integration program or realize expected benefits of the merger	___ ___ ___ ___ ___ ___ _____
3.4	Political Escalation	Political struggles over which company's management systems to use	___ ___ ___ ___ ___ ___ _____

Figure 1 below outlines the framework.

Figure 1 – Risk Management Framework



EVALUATING FRAMEWORK

We then utilized published case studies to evaluate the framework for its risk identification and risk management planning potential. We evaluated the thoroughness and potential usefulness of the framework by comparing the four cases to the framework. While we did not have the benefit of interviewing the managers involved in the cases, we conducted an examination of the cases to evaluate a hypothetical use of the framework.

VIII.I Risk Identification

We found that in the cases the risks identifiable from the cases had been identified in the literature. We did find some of the risk areas identified from the literature were not identifiable in the cases. Table 15 below tabulates the risks and risk resolutions found in the four cases. Appendix C provides details concerning the risks and risk resolutions identified in each case.

Table 15 – Tabulation of Case Mentions of Risk and Risk Resolutions

Each risk and risk resolution we identified in a case is marked with a checkmark.

Risk Area			Bombardier	Deloitte	Dow	Unity
1.1	Systems Compatibility	Risks	✓✓			✓
		RR	✓			
1.2	Integration Bias	Risks	✓	✓✓	✓✓	✓
		RR	✓	✓✓	✓✓	✓
1.3	Organizational Culture	Risks	✓✓	✓✓✓✓		
		RR		✓✓✓		
1.4	National Culture	Risks				
		RR				
2.1	Customer Relationship	Risks	✓✓	✓	✓	✓✓✓
		RR	✓		✓	✓
2.2	Contextual Ignorance	Risks		✓	✓✓	
		RR		✓	✓✓	
2.3	Adverse Behavior	Risks	✓✓✓✓	✓✓	✓	✓✓✓
		RR	✓✓✓	✓	✓	✓✓✓
2.4	External Stakeholder	Risks	✓✓			
		RR	✓✓			
3.1	Process Management	Risks	✓✓	✓	✓✓✓	✓✓
		RR	✓	✓✓	✓✓✓	✓
3.2	Integration Timing	Risks	✓✓	✓✓	✓	✓✓✓
		RR		✓	✓	✓✓
3.3	Resources Shortfall	Risks		✓		✓
		RR		✓		✓
3.4	Political Escalation	Risks				✓
		RR				✓

The *process management* risk area arises from inadequate management action or leadership of the merger process. This concern was present in all four cases. For example, in the Dow case the managers identified process management risks from the IT integration process, entering a new product line and ad hoc management of the acquisition process.

External stakeholder risks were identified only in the Bombardier case. *External stakeholder* risk is defined as a situation where outside stakeholders do not support or understand the merger process. The risks presented by the need for Bombardier to obtain European

Commission (EC) approval of the transaction were highlighted. The risks were: 1) the EC would not approve the transaction, since management perceived the EC was biased against a U.S. company buying a European business, and 2) the limited access Bombardier was allowed to Adtranz prior to approval, which impeded efforts to plan the integration.

The risks posed by *national culture* were not identified as such in any of the cases, despite three of the four acquisitions involving companies with headquarters or substantial operations in two different countries. This may be because, in the case of the cross-border acquisitions, the acquirer and acquiree both operated in numerous countries before the acquisition, and sometimes both companies had operations in the country or continent where the acquiree was located. For example, in the Unity case, South Africa-based Unity had operations in the United States prior to its proposed acquisition of Delta, which operated only in the United States. Managers at Unity framed their employee-related integration issues in terms of process or context issues, less often as content issues, and not national culture issues. For example, one employee-related integration issue for Unity concerned how to evaluate good IT professionals and dismiss others from the combined operations in the rushed environment dictated by the merger process. This was framed as a process management risk, not a cultural risk. Similarly, when confronted with the decision as to which side to pick to run the new organization, and their concerns about the possible employee gamesmanship which might result from those decisions, management did not point to cultural differences as an issue. Instead, the risk was framed in terms of context risks, primarily *adverse behavior*. Management's concerns were with possible negative reactions inherent in the context of the merger as certain groups or people were chosen over others, but these were not framed as national or organizational culture clashes.

Risks of *political escalation* were only mentioned in the Unity case, where it was characterized as benign compared to most of the exemplars from the literature. For example, we found the term “sabotaged by cliques” in the literature as an exemplar of *political escalation*, but in the Unity case, the *political escalation* took the form of the Delta staff approaching the integration manager to seek retention of two systems which provided productivity tools for business users. So the description of *political escalation* provided to management users of the framework should emphasize the range of situations encompassed by this risk area, not only the extreme cases.

VIII.II Risk Management Planning

In risk management planning, management develops a plan to address the risks they have previously analyzed and prioritized. The framework provides resolution strategies for each risk area as well as exemplary actions from the literature which help explain the strategies. We evaluated the risk management guidance provided by the framework in a similar manner as Alaranta and Mathiassen (2011) by comparing the strategies employed by the managers in case studies with those in the framework. We found that most of the resolution strategies in the framework were considered for use by managers in the cases. We did not find any strategies suggested in the cases which were not available in the framework.

We evaluated the potential effectiveness of the risk resolution strategies in the framework by reviewing the cases to determine if the proposed risk resolution strategies were applicable.

VIII.II.i Content risks.

1.1 For *systems compatibility* issues, the resolution strategy is to *analyze and design systems early*. Systems compatibility issues in the Bombardier case were discovered early in the M&A process by the senior management team at Bombardier. They recognized that these issues

required them to proceed immediately with planning for the merged systems, including evaluating what degree of integration was desired.

1.2 *Integration bias* issues arose in all four cases, as did risk resolution strategies for them. In the Dow case the framework's suggested resolution strategy of *adopting a systematic evaluation process* was used to counter two identified integration bias risks. The first risk was that Dow would "overpower" the acquiree Wolff and lose a "diamond in the rough." The second risk was that an emphasis on the speed of integration at Dow would overwhelm other considerations. Dow management discussed several of the exemplar actions listed in the framework to counter these risks, including adjusting the integration process on a case-by-case basis, evaluating the "treasured assets" of the target, and being aware of the mindset of the target. For example, Dow considered delaying the realization of annual cost savings which would come from integration of Dow's global IT systems into Wolff to avoid disturbing Wolff's "leading edge automated manufacturing process."

After adopting a systematic evaluation process, Deloitte attempted to resolve *integration bias* risks using several exemplar actions. They *considered implications of both companies' technologies* by involving key people from both Deloitte and Andersen on the integration teams and encouraging the identification and implementation of best practices regardless of their source.

1.3 The resolution strategy for *organizational culture* issues is to *plan and motivate collaboration*. This strategy was utilized in the Deloitte case, by combining people from both organizations at on offsite location, having the integration team pay particular attention to the organizational culture differences, and relying on victories in the marketplace to bring the two

groups together. These specific actions are all suggested in the exemplar actions for dealing with organizational culture issues.

1.4 *National culture* risks were not identified in the cases.

VIII.II.ii Context risks.

2.1 *Customer relationship risks*

Customer relationship risks call for managers to implement strategies to maintain marketing momentum, including retaining key employees with customer relationships, involving customers in the process, and quickly integrating market-related aspects of the merger. In the Unity case, customer relationships presented several risks due to the critical and time-sensitive role Delta's services played in their customer's operations. The risk resolution in the framework calls for management to implement *strategies to maintain marketing momentum*. Unity did that by considering taking advantage of Delta's superior knowledge of its own systems by allowing Delta to lead the integration. Unity also weighed delaying the integration until after an important, previously scheduled task for a large Delta client had been finished.

2.2 Contextual ignorance risk

Contextual ignorance, which occurs when contexts outside the company are not well understood or are insufficiently attended to during integration, may be remedied by *engaging and informing key stakeholders*. In the Dow case, *contextual ignorance* took the form of an initial lack of understanding of the potential impact of German holiday schedules on the best timing for the integration. It was also represented by Dow's initial failure to realize that Wolff had a stand-alone business services unit which provided service to other companies, but which did not fit in Dow's business model. Dow engaged and informed by considering adjusting the

integration schedule until after the scheduled German vacations, and considering numerous alternatives to quickly shutting down the business services unit.

2.3 *Adverse behavior risk*

Adverse behavior risk, the risk of employee behavior negatively impacting company performance, calls for managers to *aggressively manage employee relations*. This was a concern in all four cases, and management considered resolution strategies in all cases. Unity considered countering gamesmanship, resistance to change and potentially demoralized staff by leaving some of Delta's systems intact, creating integration departments from both companies, and announcing which systems will be terminated promptly. Deloitte sought to fight "rumors that fed anxiety among people in both organizations" by finding common ground and encouraging employees to become invested in the process.

2.4 *External stakeholder risk*

External stakeholder risk, the risk that outside stakeholders do not support, understand or collaborate with the process, was identified only in the Bombardier case. Bombardier negotiated with the outside stakeholder, the EC, by proactively working with them and resolving issues as quickly as possible.

VIII.II.iii Process risks.

3.1 *Process management risk*

Process management risks and risk resolutions were identified in all four cases. The risk resolution strategy for this risk is to *continuously plan and reorganize process*. Deloitte did this by "monitoring the integration process through a monthly survey" which allowed them to "take remedial action if… the integration goals were not obtained." This survey was also used as the basis for a monthly conference call to "share updates and ideas." Thus Deloitte utilized

exemplar actions identified in the literature by having a dedicated merger integration team and developing a systematic integration process.

In the Dow case, Dow had developed a very detailed integration methodology for its many acquisitions, and implemented this methodology via a planning center they called the Program Management Office. Through this office, Dow used exemplar actions such as preparing a “merger intent” document and having a dedicated integration team with selective participation.

3.2 *Integration Timing*

The framework suggests that managers seeking to resolve *integration timing* risks should *monitor and adapt timing*. Unity faced a large processing task for an important Delta client. This led Unity to consider speeding up systems conversion before the event or postpone it, in line with exemplar actions which suggest “integrate at proper speed” and “carefully evaluate … ability to manage pace of change.” Unity’s concern over the risk of possible disruption to the companies if the integration of the infrastructure was done too soon led them choose to sacrifice some potential cost savings to avoid the disruption, another example of monitoring and adapting their timing.

3.3 *Resources shortfall*

Some mergers are at risk of a *resources shortfall,* when there are insufficient resources or skills to properly manage the integration process. Deloitte was concerned that taking people offsite during the integration process would impact billable hours. Their solution, which was in line with the framework’s resolution strategy to *ensure and monitor appropriate resources*, was to form a national integration team to lead the integration and reduce the required involvement of other company personnel.

3.4 *Political escalation*

Political struggles over which company's management systems to use, or p*olitical escalation*, was a concern in the Unity case. Unity's proposed solution was to *implement processes for conflict resolution* by creating integration departments with resources from both companies to determine which systems should continue in use. Thus Unity could have looked to the framework's exemplar actions for guidance, including having resolution mechanisms in place and managing conflict constructively from very beginning.

VIII.III Conclusion

By applying the framework in selected case studies, we were able to better understand the risk identification potential and risk management applicability of the framework in the M&A process. We found that the overlap of the cases with the framework was substantial, as indicated in detail in Table 15 and in summary in Table 16 below. As a further check on the possible applicability of the framework, we applied the risk prioritization step to the Unity Case. Appendix E shows the results of that exercise. We found that even without the advantages of a dialogue with managers undergoing a merger, the case study was able to provide clues which allowed us to estimate the severity and likelihood of various risk areas as they might appear to a management team. Subject to its use by practitioners involved in or reflecting on an actual M&A process, we believe applying the case studies indicates that the framework can be a useful risk management tool for practitioners.

Table 16 Overlap of Cases and Framework

	Found in cases, available in framework	Available in framework, found in cases
Risk Identification	All	All except National Culture
Risk Management Planning	All	All except National Culture

DISCUSSION

After decades of practice and research, the value of corporate mergers and acquisitions to the acquiring company is still very much in doubt. The management of the risks inherent in the merger process may account for some of the problems in M&A performance. Methods of counteracting or mitigating some of the problems or risks in the merger process are presented in the literature. These include lists with recommended steps to effect a successful merger and detailed due diligence checklists developed by practitioners and researchers (Hubbard, 2001; Rosenbloom, 2002). Our research builds on previous research by listing and classifying the risks and risk resolutions in the post-selection stage of M&A, and linking the risks and risk resolution techniques in a risk management framework.

The extensive literature investigating the problems presented by mergers does not supply a comprehensive list of risks and risk resolutions, nor does it provide a framework for managing risks in the post-selection phase of M&A transactions. Our research provides a list of risks and risk resolutions derived from the literature, synthesized for easier use and understanding and refined by interviews with practitioners. We evaluated the resulting framework using previously published case studies. Our research follows in the path of research into the risk management process (Boehm, 1991), risk management within the MIS function of the M&A environment (Alaranta and Mathiassen, 2011), assisting managers in assessing the risk profile of an acquisition (Harris, 2007), and recognizing the importance of the integration process for the success of M&As (Jemison and Sitkin, 1986; Haspeslagh and Jemison, 1991).

IX.I Practitioners

Haleblian, Devers, McNamara et al. (2009) noted that scholarly insights in M&A did not seem to be helping practitioners improve their M&A results. They ask if these insights are not being transferred to practitioners, or if they are "impractical or unfeasible to execute" (p. 485). The risk management framework provided by this research is designed to be usable by practitioners in the hope it can facilitate the transfer of knowledge to practitioners.

Based in part on our experience in M&A practice, we reviewed the literature and have distilled the prior knowledge into a new form which is more accessible to other practitioners. Our work can serve as the basis for further use, analysis and refinement by practitioners and scholars. For example, our research could be used by practitioners by using a web-based software interface. The risk and risk resolution factors we have synthesized could be presented to managers using the interface. When a manager identified a risk area of interest, the research from which that risk was derived could be presented for further analysis and application. This software interface could enable our research to increase access to the detail in the literature at the time it is most needed, and may increase the transfer of knowledge. This software interface could also be used to facilitate collaboration among managers undergoing an M&A process.

This research can also serve as the basis for practitioner-oriented articles which distill the research into a more accessible, usable form for practitioners. Included in these articles could be the form for evaluating risk factors from Table 14 for application by practitioners.

A risk assessment for a particular merger could be conducted by interviewing managers while they are involved in the merger. Managers could be asked to confirm that the risk-action lists are viable and list the risks they encounter, and to evaluate the risk probability and impact for each factor. From their evaluations, the framework can be changed to improve ease of use

and the practicality of the risk-action list for a particular acquisition or industry. This type of approach was used by Persson, Mathiassen, Boeg et al. (2009) to develop a risk management framework for use in distributed software projects.

Our risk management framework may be useful in guiding practitioners in the management of M&A transactions. It may prove useful for management teams to explicate the risks perceived by various managers within a company to encourage agreement or understanding of the risks presented by a pending merger.

Researchers working with practitioners could utilize the framework to evaluate its usefulness in relation to current company practices in an active M&A process or retrospectively to review a company's M&A experience. Mohrman, Gibson and Mohrman (2001) found that practitioners viewed research as more useful when it was applied collaboratively with researchers to address company problems. A joint interpretation of results with practitioners may increase the knowledge transfer of this research to practice.

Serial acquirers may increase their likelihood for successful merger outcomes based on the learning and expertise they acquire (Haleblian and Finkelstein, 1999). It is possible that part of that increased success rate is due to identifying and mitigating the risk factors inherent in acquisitions. This research produced a framework which may assist managers in helping them document and apply that learning for their organizations for future acquisitions. Although we believe that the framework would be of assistance to managers, we have not been able to validate that it would enable them to achieve different M&A outcomes.

Practitioners may benefit by the implementation of risk lists proposed in our framework. The benefits of implementing checklists for software practitioners are discussed in Keil, Li, Mathiassen, and Zheng (2008), who found that the use of checklists helped the practitioners

identify more risks than when no checklist was used. They also found that managers changed their behavior when certain types of risk were identified, but that the total number of risks identified did not influence behavior. Our framework could be used to identify the key risks which influence the behavior of managers during the M&A process, and provoke further investigation into those particular risks.

IX.II Contributions/Future Research

The importance of the risk factors and viability of the risk resolutions identified here, and their impact on M&A transactions, could be explored using similar methods as in Wallace and Keil (2004). As was done by Wallace and Keil with software project managers, M&A managers from numerous companies could be surveyed to indicate which risks were present in recent transactions they managed. They could then evaluate the success of the M&A process, including its completion versus the schedule, achieving other short and long term goals, and their success in managing the risks. We might then be able to better understand which risks impact merger success, how well the resolutions are utilized, and evaluate the success of the application of those risk resolutions.

Management behavior when a risk management framework is included in the M&A process could be compared to behavior without the use of these risk management techniques. These behaviors could include both the identification of risks, their use of risk resolution techniques, and their ex post evaluation of the efficacy of their actions.

The risk management framework may serve as a basis for further research seeking to explain M&A process issues and M&A outcomes. For example, researchers could review completed acquisitions to determine the degree to which the risk management framework was implemented, and evaluate the effect on M&A outcomes from using the framework.

Researchers could compare M&A performance to the riskiness of the process. The risk of the process could be determined using the framework to measure managers' level of perceived risk in their particular M&A transactions. This risk could be compared to the performance of the mergers using the traditional measures of performance such as CARs, operating performance or management evaluation.

Researchers might also be used to determine which risk factors most threaten M&A performance. Management's use of risk resolution techniques or other responses to the perceived risk could also be evaluated to determine if risk factors are best resolved using particular risk resolution techniques. For example, when organizational culture differences are perceived to be an important risk, which of the resolutions suggested by the literature lead to effective resolution? Under what circumstances does one work and not the other?

Some of the lessons learned in the M&A arena may prove helpful in evaluating risks in strategic alliances, joint ventures and other situations, such as some private-equity backed acquisitions. However, the focus of this dissertation is on M&As which involve a change of ownership control and which require some degree of integration of the two operating entities.

For additional evaluation of the framework, several interviews could be conducted with members of the same merger team within an organization, as was done by Harris (2007). Even more preferable would be the use of the framework during the course of an actual project, as was done by Iversen (2004).

The framework may benefit from use and iterations with practitioners while they are in the process of managing the M&A process. It may prove beneficial to alter the framework to suit the M&A practices and issues of specific industries.

Although our search of peer-reviewed articles was extensive, there may be additional relevant research, either in the non-academic literature, or references published prior to 1992, which would contribute to our understanding of the risks and risk resolutions in M&A.

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Appendix B: Detailed Comments from Cases

1. Unity Case

Risk#	Risk Faced	Description of Problem	Resolution Strategy Per Framework	Description of Resolution Strategy Considered or Utilized in Case
1.1	Systems Compatibility	Integration problems would be created by adding a consolidation of the Unity and Delta systems. Unity's systems already had substantial weaknesses, and Delta had not consolidated its own systems, presumably because of the cost, difficulty and potential impact on customers such a consolidation would have entailed		
1.2	Integration Bias	New organizational structure needed for combined companies. Some felt Unity staff should take over since they were the acquirer	Adopt systematic evaluation process	Considered creating integration departments drawing upon resources from both companies.
2.1	Customer Relationships	Unity did not want customers to leave Delta because of its new management		
2.1	Customer Relationships	Large processing task for one of Delta's biggest clients scheduled to occur in three months		
2.1	Customer Relationship	A specific requirement for a client was not well documented, if not delivered client might be lost	Implement strategies to maintain marketing momentum	Allow Delta to lead the integration since Delta knows their systems best.
2.3	Adverse Behavior	Delta staff members already resisting change due to Delta systems possibly being retired	Aggressively manage e/e relations	Back down from terminating some Delta systems?
2.3	Adverse Behavior	Gamesmanship if picked either side to run the new organizational structure	Aggressively manage employee relations	Considered creating integration departments drawing upon resources from both companies.
2.3	Adverse Behavior	Some staff members will be demoralized by the increased uncertainty brought about by change	Aggressively manage employee relations	Be candid and announce which systems will be terminated, or delay announcement until last possible moment

3.1	Process Management	Largest acquisition Unity had done.		Dedicated Integration team appointed at Unity with experienced members from offices around the world
3.1	Process Management	Evaluating good IT pros and letting others go difficult in rushed environment dictated by merger process	Continuously plan and reorganize process	None proposed
3.2	Integration Timing	Work can't begin due to legal and regulatory hurdles		
3.2	Integration Timing	Large processing task for one of Delta's biggest clients scheduled to occur in three months		Speed up conversion before event?
3.2	Integration Timing	Disruption if infrastructure (phones, networking hardware) done too soon	Monitor and adapt timing	Run two systems for a while to avoid disrupting clients vs. cost savings expected from consolidating soon.
3.3	Resources Shortfall	Large acquisition would be most demanding that Unity had done		Create effective plan to cover all requirements. Specifically, integration plan must considers and prioritizes four critical factors software, infrastructure, organizational structure and people.
3.4	Political Escalation	Political struggles over which company's management systems to use	Implement processes for conflict resolution	Considered creating integration departments drawing upon resources from both companies.

2. Dow Case

Risk#	Risk Faced	Description of Problem	Resolution Strategy Per Framework	Description of Resolution Strategy Considered or Utilized in Case
1.2	Integration Bias	If we overpower acquiree [Wolff] we may discard a diamond in the rough	Adopt systematic evaluation process	Recognized that Dow could learn from Wolff's high level of automation and transfer this to other business units.
1.2	Integration Bias	To some people at Dow, speed of integration meant everything.	Adopt systematic evaluation process	Adjust integration process on a case-by-case basis
2.1	Customer Relationships	Dow entering specialty chemicals business with new types of customers	Implement strategies to maintain marketing momentum	Consider what strategy (fast or slower integration) would be most effective. Integrate customer-facing activities at a slower pace or not integrate them at all
2.2	Contextual Ignorance	Germans consider their summer holiday sacrosanct, this might delay integration timing.		Proposed launching none of the integration projects until October.
2.2	Contextual Ignorance	Wolff had a business services unit which provided services to outside companies, as well as to Wolff, using a business model which was foreign to Dow. Dow did not know about this unit before making the purchase.	Engage and inform key stakeholders.	Dow needed to find a completely new IT system for this unit, which would cost $2 million.
2.3	Adverse Behavior	Gaps between each other's way of working. Wolff's staff working against instead of with acquirer staff.		Created a "chill period" during which companies bring issues to the table, jointly work on them and make sure you don't miss any. Through intensive interaction, got the Wolff staff to cooperate.
3.1	Process Management	IT integration process concerns	Continuously plan and reorganize process	Integration speed is key, and is better achieved through implementation steering committee, joint planning sessions with both sides, setting key milestones, have Day One checklist and devise performance metrics
3.1	Process Management	Management of the acquisition process was ad	Continuously plan and	Developed a standard methodology for managing

		hoc	reorganize process	the due diligence and implementation stages
3.1	Process Management	Entering new product line so risk in integration approach chosen	Continuously plan and reorganize process	Determine how fast and fully to integrate passed on strategic rationale for the merger. Provided time for input from all acquirer functional and business leaders before integration planning complete
3.2	Integration Timing	Three month extension of the integration requested. Dow upper management resisted effort to delay integration due to delay in realizing cost synergies.	Integrate at proper speed	Delay integration to allow time due to summer vacation and concerns about implementing without adequate planning.

3. Bombardier Case

Risk#	Risk Faced	Description of Problem	Resolution Strategy Per Framework	Description of Resolution Strategy Considered or Utilized in Case
1.1	Systems Compatibility	Certain management practices need adjustment.	Analyze and design systems early	Integration planning begun while still awaiting regulatory approval
1.1	Systems Compatibility	Fundamentally incompatible organizational structures must be reconciled.		Integration planning begun while still awaiting regulatory approval
1.2	Integration Bias	How quickly to integrate and what existing approaches to replace?	Adopt systematic evaluation process	BBD tried to eliminate waste ... by applying … management approaches over time as opposed to pushing to replace existing methods. Transfers were not all one way, aerospace also shared its best practices with engineering.
1.3	Organizational Culture	"I don't think Adtranz has had enough time to develop its own culture. Every two years there seems to have been a change of ownership, a change in structure, a change in values, and a change in processes. So under the circumstances you don't get a good sense of who you are."		
1.3	Organizational Culture	Need to get management focused on the operations…avoid finger pointing at former Adtranz management and create a climate conductive to teamwork.		
2.1	Customer Relationships	Should we focus our planning on ways to improve the product quality and reliability of Adtranz equipment with existing customers?	Implement strategies to maintain marketing momentum	
2.1	Customer Relationships	Cost cutting could hurt market performance of company.		Ensure a balance between cost reduction … and revenue growth.
2.3	Adverse Behavior	The management team would be demoralized if Bombardier was invited in only to later walk		Negotiated a delayed payment to be made after Bombardier had a chance

		away from the transaction.		to do more due diligence.
2.3	Adverse Behavior	How to transform businesses into market leaders?	Adopt systematic evaluation process	… good relationships with existing personnel and development of pride within those on the team.
2.3	Adverse Behavior	Need to streamline costs difficult to do quickly in a large acquisition.		Focus first on creating a healthy operating environment.
2.3	Adverse Behavior	Need to minimize tensions and maximize teamwork with personnel changes imminently on the horizon?		
2.4	External Stakeholder	EC approval process limits pre-closing due diligence and interaction between firms.	Mobilize external shareholders	Negotiation strategy with EC to id critical issues in advance and minimize disagreements.
2.4	External Stakeholder	EC might have a bias against North American companies.		Tried to shape focus of EC on European market in total, make concessions to EC.
3.1	Process Management	Do we sit and wait for approval from the EC before taking steps toward integration?	Continuously plan and reorganize process	
3.1	Process Management	Have to make sure people are focusing on key factors and what needs to get done.	Continuously plan and reorganize process	You should never forget that people like successes and being on the winning team.
3.2	Integration Timing	BBD had a reputation for being patient in the integration of the acquired company.	Integrate at proper speed	
3.2	Integration Timing	Should we start to institute personnel changes within BT in anticipation of the merger, and if so at what pace?	Integrate at proper speed	

4. Deloitte Case

Risk#	Risk Faced	Description of Problem	Resolution Strategy Per Framework	Description of Resolution Strategy Considered or Utilized in Case
1.2	Integration Bias	"There was an attitude among some employees within Deloitte … that people coming from Andersen were damaged goods and that these people should be grateful that they had found a good home." "…the Andersen people would be blamed if the combined organization missed the financial targets…. Such scapegoating would detract from the integration efforts."	Adopt systematic evaluation process.	"Equal numbers of Deloitte and Andersen personnel were represented on the team. An effort was made to ensure that key people from both sides were involved, in order to guide the integration challenge." "Best practices were identified, and integrating officers were encouraged to implement these practices across offices."
1.3	Organizational Culture	"The cultural issues were showing up in day to day behavior." "Cultures do not change that quickly." "We don't want to lose people because of poor interpersonal treatment." "People were constantly on-site at the client's business."		"The actual successes achieved in the marketplace would hold the combined entities together." The national integration team paid special attention to cultural gaps between members of the two organizations. "… taking the people from the two organizations to an offsite location to deal with the issues of cultural differences…"
2.1	Customer Relationships	"… our goal is to make this transition absolutely seamless for our clients…" "Of course, we want to be able to retain all our clients."	Implement strategies to maintain marketing momentum	
2.2	Contextual Ignorance	"Strict limitations on contact between Deloitte and Andersen to permit regulatory review."	Engage and inform key stakeholders.	
2.3	Adverse Behavior	"Numerous rumors that feed anxiety among people in both organizations…" "The Andersen people probably have a fear that	Aggressively manage employee relations.	"… we have to find common ground." "…individuals would see (or feel in their pocket) that investing significant

		they will be taken over and their identity and sense of value will be lost."		resources in the transaction… was worth it."
3.1	Process Management	"There is often a strong tendency on the part of those leading the change efforts to declare victory too soon."	Continuously plan and reorganize process	"Deloitte monitored the integration process through a monthly survey which would allow the team to benchmark unit to unit over time, and to take remedial action if, at specific stages, the integration goals were not attained." "Once every two weeks, the managing partners of each of the five Deloitte offices would convene for a conference call to share updates and ideas, some of which resulted from the … survey."
3.2	Integration Timing	Some Deloitte employees feared that Deloitte management in its haste to consummate this new deal and welcome Andersen, was forgetting about its own employees.	Integrate at proper speed	
3.2	Integration Timing	"… a lengthy process increased the risk that a major client and a significant number of talented professionals would be lost."	Integrate at proper speed	"Because both sides moved rapidly, the entire process was completed in six weeks."
3.3	Resources Shortfall	Taking people offsite to deal with interpersonal issues would affect billable hours.	Ensure and monitor appropriate resources	"A national integrations team consisting of 12 individuals was formed to lead the integration."

Appendix C: Detailed Comments from Interviewees

	Risks	Resolutions
1.1 System Compatibility	A: If we do a larger acquisition our main challenge is the IT department. That is one of the risks if we were to do too many [acquisitions] too quickly. A: The challenge is …the company we acquire…may take two months to close their books as opposed to 5 or 15 days.	D: Have functional areas talking [early]. A: IT will be putting in the network so they can share info with us immediately [after the merger].
1.2 Integration Bias	A: concerned about their system going down, not working. C: So they closed the transaction in February, [CEO] was let go in April, [CFO] let go in May. Throughout that time, I don't believe that anybody from acquirer came to our [acquiree] office. .	D: Rank them [management] into A & B players, evaluate them over time, spend time to identify weaknesses. It's situational, but be overly communicative about what you intend to do. D: Be fair to those who are departing and help with the outsourcing. D: … if you've got to pick a side, pick a side. A: Our biggest savings is in HR, getting them on the same health care…property casualty,..payroll…401k. A: Within a month we will have them on our mainframe, our network, so they will be billing out of our system. A: We then let them [acquiree management] manage their people to build their budgets, try to achieve what we feel they are capable of achieving. A: In acquisitions we do not use outside consulting because… we feel we have a very good understanding of what the business is worth. E: You have to have buyin from both sides.
1.3 Organizational Culture	D: Can we get the rank and file to concentrate on the positives and not the negatives? C: No communication, no human compassion [from acquirer as it fired employees]. C: The big risk that I have seen, …it's the people, the culture, and how do they fit. B: Boards bring in [managers] from a company with a culture of infrastructure. They know how to work within the system, but not how to create it.	D: Planning and participation. D: Spending the time to understand [organizational cultures] made us much more enthusiastic about that transaction. D: Merger committee has got to have both sides on it. D: Sometimes only one culture will work. If that is the case, communicate it. If you've got to pick a side, pick a side. B: It is impossible to overcommunicate.

1.4 National Culture	D: They didn't do a good job of connecting with the [other country's] management. D: There was not an effort to make the connection between the future business owners. It caused suspicion and mistrust.	
2.1 Customer Relationships	D: Don't lose the top five customers. C: We were very careful about how we handled customer relationships. E: People [customers] want to make sure nothing is going to change.	D: It's pretty easy to send out a letter to every single customer saying, here is the situation. D: Hopefully put a positive spin on it, if there is one. A: We give them (customers) letters to let them know there is an acquisition. They legally have the right to…opt out, and at that point in time we would have to decide if we wanted to go through with the acquisition, if they are large enough to affect the acquisition. C: We were very focused on getting out to the big customers after we announced a deal, very quickly. We'd go to see the CEO [of customers] personally, just in an effort to say everything's fine. That helped a great deal. E: Explain [to customers] that nothing is going to change, but on the upside there are more resources available to you.
2.2 Contextual Ignorance	A: What we pay most attention to is to make sure that the [suppliers] can't move. C: The first real risk was negotiating… patents. [Three large competitors] held all the patents. E: That [supplier relationships] can sometimes be a sticking issue	A: We have an attorney to deal with the regulations of that state. A: We are conservative and don't force the issue, if something [an acquisition] is not going to work you don't do it. (1993)
2.3 Adverse Behavior	D: People wonder what's up what is my role going forward? D: Do they [acquirer] share my vision or are they going to take me out? It caused suspicion and mistrust. D: The biggest risk is losing your best performers. You are going to be left with the guys nobody wanted. A: …they [acquired employees] are always scared of what you are going to bring them. C: I got an email … that a female staffer [at acquired company] was	D: Employee communications D: Don't mess with people's benefits. D: Position the message ..in a way that achieves your corporate objectives. D: Talk about benefits, talk about 401k. D: Communicate a clear compensation program going forward for those who are staying. D: You can always have direct conversations with those who are your best performers and bring them to be inside of a team and tell them you've been identified to stay. A: The key is just getting the seller's management to buy off on your program

	being sexually harassed. C: He [the seller] got a card from [an employee of the seller] thanking me for nothing. [Employees had previously complained they were underpaid while owner sold company for a lot of money. C: [Failure to] keep the intellectual history [people]…as soon as you walk from that you have a real problem.	before they close the deal so they know what to expect. C: …fly out [immediately] to have a conversation with her [alleged sexual harassee]. B: Might want to bonus your guys, because they know you are making a ton of money. E: The thing you cannot get wrong is messing with people's pay or benefits. BG: …if you can convince people in the company that you are going to be honest and truthful, and you actually demonstrate that with your actions, not just your words, its amazing what you can accomplish even in a difficult environment. B: It is impossible to overcommunicate.
2.4 External Stakeholders	A: Our main risk in our industry is with our suppliers. C: Debt holder might object to the sale of the company	D: Communicate with… vendors, landlords, employees, where you can. A: What happened in the last few acquisitions is the owner stayed and the company continues with the same name and the same invoices so the customers do not notice the difference. C: The first thing we did [after signing LOI] was we went to [noteholder] and said …we are going to pay you off, just work with us.
3.1 Process Management	D: Lack of proper, comprehensive, well thought out planning. D: If you don't have those conversations those first three months [post-acquisition] they assume you are not watching. A: …the risks…are going to be workman's comp claims, your health insurance claims and so forth. B: We weren't really sure what we bought B: Their efforts to integrate our business were next to nil. The guy who was supposed to merge the business was in exactly one conversation.	D: Identify the issues, mitigate the risks, that is how you can get things done. D: It all gets lost if you don't capture it [info about the process] somewhere and have them coordinate with each other. A: If they have high [workers comp claims] the first thing we implement is safety programs. B: [Before the closing] we terminated everybody and hired the people we wanted. So we got around our management risk with no obligations for pensions, for whatever. B: …they went out and put a specific integration team on that business, so that it was handled properly. E: The due diligence team would transition over, largely, for the relevant people [to integration].
3.2 Integration Timing	D: There was no planning done, caused anxiety	A: We budget every line item…on a monthly basis.

	D: Post-closing you've really gone negative in terms of shareholder value. The period [immediately after the close] will determine whether value increases or decreases. C: One of the difficulties is that we weren't really sure what we bought. C:[Buyer} said they were going to integrate the business and they didn't have a plan. So without a plan … they just languished. E: People struggle with integration because they don't plan.	E: Integration is, quite simply, fanatical attention to detail. E: The approach we took was that due diligence was also integration planning.
3.3 Resources Shortfall	D: Immediately after the closing…management is exhausted. A: Our overall [IT] legacy system is not where it needs to be, one of our concerns we are trying to address as we speak. C: One of the risks was that [the seller] would come and foreclose us as we were in breach of material covenants. We didn't have any money. C:We didn't have very deep pockets	D: For the first three months, have a weekly call, go over the initiatives you have A: We have a management [integration] team, myself [CFO], the President of our company, the sales/general manager of the [home state] location, IT department. C: We managed [breach of material covenants] by maintaining good relationships with the [seller's] CFO. C: They learned, they put the right resources on it. E: The due diligence team would transition over, largely, for the relevant people.
3.4 Political Escalation	BF: Not an alignment of vision among top management. BG: The new CEO had enormous power. He did not understand manufacturing, he was a retailer, but owners knew him… B: So they started force-fitting to meet expectations. B: They fired the Chairman and CFO, and brought in a guy who was supposed to be a savior and gave him stupid incentives that insured its demise.	A: The first thing we will do is… take the HR department with us. A: They will be on our HR program the day after we close. B: …looking at the organic growth, what was possible in the business.

Appendix D: Examples of Interview Questions

Semi-structured interviews were conducted with five senior managers. The semi-structured interview format included the following questions:

1. Thinking about the mergers you have been involved with, or just the last few if that is easier, what *risks* do you believe threatened or could have threatened the success of the combined companies?

2. Were there risks which were dealt with so early and quickly that they were not a problem, but in your experience could have become a threat if ignored?

3. Thinking of the M&A process itself, were there risks relating to the management of the process, or the timing of the merger completion or integration? Examples could include failure to plan for integration, moving process too fast…

4. Have you had acquisitions which failed, either being abandoned before closing or closed and then merger did not live up to expectations? If so, why abandoned or what caused the underperformance?

Appendix E: Risk Analysis and Risk Prioritization in the Unity Case

In the risk analysis step, management evaluates the risks they have identified and assigns a rating for the likelihood and impact level for each risk area. We reviewed the Unity case to apply the risk analysis step of the framework. We reviewed the case and recorded the risks described by the managers in the case. Based on the reported comments of management about the risks they faced, we developed an estimate of the risk probability (level) and an estimate of the loss (impact) on a scale of Low (1 point), Medium (2 points) and High (3 points). We evaluated the number of mentions of different risks within a risk area, and noted the degree of impact they described. Where we did not get specific guidance from the managers' comments, we made our best estimates of the level and impact of the losses. See Table 15 below for the values we derived from the managers' comments.

It appears that if the framework had been used in the Unity case, it might have contributed to the risk management process. It may have helped management recognize and prioritize the risks by providing a risk list specific to the transaction. The use of the risk resolutions in the framework as added input to the risk resolution process may have helped Unity management in their risk management. For example, a manager on the integration team was aware that common reasons for disappointing acquisitions include poor organization fit and poor cultural fit. However, when listing his integration priorities and discussing integration plans, he prioritized four areas with no further mention of these issues, and it appears they were not addressed. Use of the framework may have caused his team to evaluate those risks level and impact of risk specifically for their integration so they could be addressed appropriately in risk management planning.

In using the Unity case for an evaluation of the framework, we were limited by the information available in the case study. The case study was not written for our evaluation, so the focus and emphasis of the authors may not have made the case ideally suited for our evaluation. Since the framework was not used during the M&A process, but was applied by us retroactively, we were not able to evaluate how a management group might actually use the framework to guide or change their process. And we are not able to look back and see the results of the M&A process to determine the framework's usefulness.

Table 14-1– Risk Analysis of Unity Case

	Risk Name	*Risk Definition*	*Risk Level*			*Impact of Risk*			*Risk Ex-posure*
			L	***M***	***H***	***L***	***M***	***H***	
1.1	Systems Compatibility	Merging firms have practices, systems, reward systems or operating policies which are so incompatible integration problems are created.			x			x	9
2.1	Customer Relationships	Customer relationships are negatively impacted by the merger.			x			x	9
3.3	Resources Shortfall	There is insufficient slack, resources or skills to properly prosecute the integration program or realize expected benefits of the merger			x			x	9
1.2	Integration Bias	Integration decisions are dominated by one party or by limited business, technical or functional areas.		x				x	6
3.2	Integration Timing	Timeliness of the planning for and implementation of the integration is inadequate.			x		x		6
2.3	Adverse Behavior	Employee behavior due to the merger process negatively impacts company performance during and after the merger process.		x			x		4
3.1	Process Management	Inadequate management action or leadership of the merger process leads to a significant departure from merger goals.		x			x		4
3.4	Political Escalation	Political struggles over which company's management systems to use		x			x		4
1.3	Organizational Culture	Merger process or integration is hampered or resisted due to differences in corporate cultures.							0
1.4	National Culture	Merger process or integration is negatively impacted by differences in nationalities, language or culture.							0
2.2	Contextual Ignorance	Contexts outside the company are not adequately understood or are insufficiently attended to during the merger process.							0
2.4	External Stakeholder	Outside stakeholders do not support, understand or collaborate with the process.							0

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