

DISSERTATION

**HUMAN CAPITAL METRICS: A CRITICAL DECISION POINT DURING THE
MERGER AND ACQUISITION PROCESS**

Submitted by

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In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

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Fall 2005

UMI Number: 3200659

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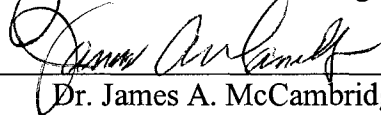
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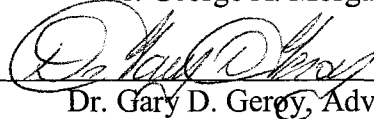
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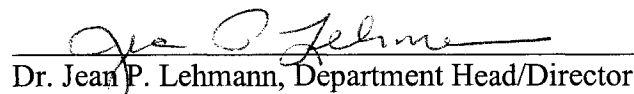
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ABSTRACT OF DISSERTATION

HUMAN CAPITAL METRICS: A CRITICAL DECISION POINT DURING THE MERGER AND ACQUISITION PROCESS

This study examines the importance of human capital during the merger and acquisition (M&A) process. M&A has become a commonplace strategy in the global business world of the 21st century. Approximately 50% of attempted mergers fail to live up to management's financial expectations. Post-mortems of failed integrations suggest that the human component is often a leading cause of failure and the deleterious effects on stakeholders.

A prescriptive research method was designed within the quantitative paradigm that used a secure web format to administer an original merger and acquisitions survey instrument (MASI) to a group of 312 masters' level business and human resources students. The MASI gathered responses on a 7 point rating scale to variables in three general areas: the M&A decision process, identifiable human capital factors, and measurable human capital manifestations. Data were analyzed using *t* tests, pairwise *t* tests, repeated measures ANOVAs, and qualitative coding processes on two open ended responses.

Findings from the data suggested that management effectiveness, culture, and human capital valuation are the three most critical decision points to focus on during the merger and acquisition process. Human resources and other business participants significantly differed on only 4 of the 19 variables: regulatory compliance and employee demographics in the identifiable factors group; and human capital valuation and employee contracts/unionization in the measurable manifestations group. No significant

differences were found between participants who had experienced successful or unsuccessful M&As.

This study is significant in four overarching ways:

1. An original survey (MASI) was created to research 19 variables suggested by the literature.
2. Of the 19 variables, one in each group was rated significantly higher than most others by survey participants: management effectiveness, culture and human capital valuation.
3. The study suggests that there are significant differences in the viewpoints of human resources and other business management regarding the M&A process within two of the identifiable factors and two measurable manifestations—but not within the decision making group.
4. The study also suggests that there are no significant differences in the viewpoints of participants who are successful or unsuccessful in their M&A experiences.

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ACKNOWLEDGEMENTS

Dr. Gary D. Geroy: This Ph.D. would not have been possible without your guiding mentorship as advisor over the past eleven years. Thank you for your unwavering support and the countless hours of scholarly discussion needed to plan and execute this dissertation.

Dr. George Morgan: As you well know, chapters 3 and 4 would not have happened without you! You are truly a professor emeritus!

Dr. Jim McCambridge: Your advice was always right on target; and when my accessible population looked darkest you came through!

Dr. Jim Banning: You taught me to always search for the underlying truth in research!

Dr. Don Quick: Your technical knowledge and hard work made the web survey possible.

Dr. Jerry Gilley, Dr. Jackie Hartman, Dr. Hunt Lambert, and Dr. James Olienyk: For allowing access to your masters' students.

Maggie Smith-Bruehlman: To my wife of 21 years and a scholar in her own right, congratulations on completing your thesis and graduating with your M.A. Spring 2005. Although you may not have known it at the time, your faith and love kept me going. I'm glad you didn't get that "dissertation divorce" after all!

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CHAPTER 1: INTRODUCTION

In the year 2000 alone, the worldwide volume of mergers and acquisitions reached 37,000 transactions with a value of 3.5 trillion US dollars (Picot, 2002). In just the United States, M&A transactions in 1997 totaled more than 900 billion (Clemente & Greenspan, 1998). There are many explanations given for this deal volume, Daniel and Metcalf found the reasons most often mined from business were to accelerate growth or protect current market share; other reasons include acquiring technology or a new business segment, to reduce competition, to acquire intellectual or physical capital, to ensure raw materials pipeline, or to achieve a global presence (2001). Issues faced by organizations undertaking mergers and acquisitions transcend finance and technology and other traditional business issues and embrace human capital factors.

The Realities of 21st Century Business

The traditional business climate is changing; the very foundation of business strategy is undergoing a metamorphic shift. Technological change and increased competition are driving an increased focus on developing and improving core competencies and how best to leverage them to competitive advantage. Many companies are realizing that one of their best and potentially fastest ways to achieve competitive advantage is through the merger and acquisition process (Rankine, 1998). Clemente and Greenspan found: “Companies of all sizes and all industries worldwide are seizing the opportunities to broaden their competitiveness by forging corporate combinations with

strategically synergistic partners” (1998, p.1). The underlying business rationale is typically to achieve growth and tap new markets.

To start at economic “ground zero,” in the business world profits are most commonly earned by creating value which is then compensated by the purchaser of the good or service in the form of money. In the public company sector, profits are primarily measured in the form of cents/dollars earned per share of stock. Virtually all activities at the management level of the company are driven by this never ending quest for profit/earnings per share (EPS). Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) live and die by the sword of EPS; and all the way through the corporate food chain continued employment and well being hinge on quarterly earnings reports. In a capitalistic economy profits are viewed as a good thing by most observers, and this researcher would agree. The rub comes in how to maintain the continual, expected incremental earnings increase per share?

M&A—Strategy of the Deal

Many companies decide to *buy* the increased market share, revenue growth and economy of scale benefits, and hopefully profits which will translate into a healthy bottom line. Thus the merger and acquisition (M&A) of companies has become commonplace in the business world to help satisfy this end. In 1999 over 8,000 mergers were announced in the United States alone; further underscoring the magnitude of the M&A trend is the \$12 trillion dollar value of US acquisition announcements from 1980—2002 (D. C. Carey & Ogden, 2004).

Jerre Stead the Former Chairman of NCR commented on mergers and acquisitions (M&A’s) by stating: “It’s easy to do a deal. It’s tough to do a deal that

works” (Schmidt, Towers Perrin Forster & Crosby., & Society for Human Resource Management (U.S.), 2002, p.3). One study by Schweiger went so far as to compare the failure rate of mergers and acquisitions to the divorce rate in the United States (2002).

Mergers and acquisitions are purported to be for many purposes, but in the end they are for but one purpose—to increase profits and ultimately earnings per share. Through researching companies’ reasons for merging, Schmidt (2002) found the following reasons as most common motivations to merge:

1. Grow market share.
2. Be leader in industry consolidation.
3. Enhance brand strength/reputation.
4. Reduce operating/overhead costs.
5. Enter new industry/expand product market portfolio.
6. Access talent/management capabilities.
7. Access new technologies/know-how.
8. Access manufacturing capacity/expertise.

The reasons to merge sound economically enticing, however, after four years of merger approximately 50% of all international M&A alliances failed (Picot, 2002). Based on studies by KPMG in Europe, 53 percent of deals destroyed value for shareholders and only 30 percent left companies in a better financial position (Mayo, 2001). The financially successful segment of mergers or acquisitions that is positive to the bottom line is commonly said to be accretive.

People Are the Business

Schweiger further posited: Deals, or more specifically mergers and acquisitions that succeed are largely dependent upon the selection and retention of key people; or to broaden our perspective a critical mass of human capital must be retained to run the integrated business (2002). Picot agrees and clarifies,

Human resource (HR) strategy and policy play a strategic role in the success of M&A. Their significance is often overlooked, since decisions for or against a merger or acquisition are usually based on factors such as market share, market access, product strategy and financial considerations. Instead of including HR experts in the initial decision phase, the human aspect is often more closely examined only when integration issues being to emerge. At that point, it is often too late (2002, p.309).

Both accretive and non-accretive M&A deals impact large numbers of stakeholders: Shareholders, employees, communities, governments and customers. This study shall focus almost exclusively on the employee or human capital segment of the stakeholder continuum. Just about anyone who is familiar with business had heard the often used adage “that people are our greatest asset.” What may be surprising is that as the majority of companies transitioned from an industrial based to knowledge based production reality, more focused on the knowledge of people than on machines; people really are becoming a business most valuable asset. Aldisert surmised that an approximate value of the human capital of a business may be determined by simply subtracting the book value from the market value (2002). Even so, most firms do not have human capital strategies; instead figuring that is something that must be happening in the Human Resource Director’s office—or certainly nearby. However, this is beginning to change as more and more market capitalization and ultimately, good old dollars and cents are being reflected in this seemingly intangible asset called human capital.

Aldisert divides the human capital universe into three segments:

1. The strategic importance of human capital. It is important that organizations realize that the plant-centric to people-centric shift has already occurred and will not likely be shifting back, but accelerating.
2. The measurement aspect of human capital. In the simplest of terms, this segment comprises theory and techniques used to value human capital. This may be one person or human capital for any entire country. At this point, there are no regulatory accounting standards requiring financial disclosure of human capital in financial statements. Quite possibly because virtually no consistent measurement methodologies seem to exist.
3. The third segment will sound more familiar to most people; how to develop human potential. This area includes, recruiting key talent, providing an optimum work environment, facilitate training and development activities. A new twist for many companies is that they are encouraged to establish measurements and zealously track the organization's performance (2002).

Mergers and acquisitions supply the contextual setting for an examination of human capital factors; the primary goal being to identify and quantify those factors which may be used to better evaluate an M&A decision. How the M&A process and human capital factors interrelate, and whether they lend themselves to identification and quantification—are the primary focus of this research.

Merger and acquisition (M&A) transactions are by their very nature asking the question how much is a given business worth—not only the assets—but the aggregate human capital as well. In most cases this issue is either ignored, ill understood, or a best

guess with dollar signs. Within these contexts decision makers are challenged to embrace the notion people have a fundamental and innate right to be valued. Traditional business measures of people's worth have tended to focus on the soft, intangible, "warm-fuzzy" side of the issue and are outdated. In modern knowledge-based economies people should, and must additionally be valued in dollars and cents and other applicable hard-metrics if their true worth to the business economy is to be understood.

M&A: The Ghost of Christmas Future

This research contemplates an ideal world in which mergers and acquisitions follow an orderly process conserving the people or human capital of each respective company and the resulting entity. This overarching concept and attendant questions shall be addressed as human capital factors. It is believed that the economics of business and specifically mergers and acquisitions may follow processes and have identifiable and measurable human capital factors in common that affect the success or failure of the attendant merger or acquisition. These identified and measurable human capital factors shall be termed human capital metrics.

As the previous discussion suggests, mergers and acquisitions and people/human capital appear to be inexorably intertwined. Additional study and exploration of the relationship between M&A and human capital is warranted and will hopefully lead to an increased understanding of both entities. With the failure of business acquisitions at such a high level, it seems likely that there may be room for considerable improvement in the way human capital is managed during M&A's, to the benefit of all shareholders.

In order to reach a reasonable understanding of the relationship between mergers and acquisitions, and human capital metrics additional focused exploration of related

topics is required. This discussion sets the fundamental knowledge base of the proposed research project.

Overview of the Merger and Acquisition Process

While there are many variations depending upon the industry segment and type of M&A transaction, they tend to follow a longitudinal process with a number of steps or stages in common. Two relatively concise, representative examples are offered to aid reader understanding of the merger and acquisition context for the study.

Daniel and Metcalf offer a representative listing of a chronological M&A process as adapted from their (2001) work:

1. Identify potential acquisition targets.
2. Narrow the list of choices.
3. Select a “short list” of companies.
4. Review regulatory compliance.
5. Conduct preliminary discussions.
6. Sign a letter of intent.
7. Conduct due diligence.
8. Complete financial negotiations.
9. Sign definitive agreement.
10. Announce the deal.
11. Close the transaction.
12. Integrate the companies.

Obviously, this is just a brief overview with many steps omitted with a goal of quickly familiarizing the reader with the basic and generally representative M&A process.

Schmidt calls this process the M&A life cycle and offers a similar chronological overview with more included detail. The following outline is adapted from Schmidt's 2002 work:

1. Pre-deal

- a. This phase of the process focuses on finding compatible companies.
 - i. Develop a strategy for growth.
 - ii. Criteria are set for M&A target selection.
 - iii. Identify potential candidates.
 - iv. Choose a best fit candidate for a deal.
 - v. Develop a plan to execute the deal.

2. Due diligence

- a. This phase ensures that the deal is sound and establishes relative value.
 - i. Verify strategic expectations.
 - ii. Validate the price.
 - iii. Confirm leadership commitment.
 - iv. Discover significant liabilities and exposures.
 - v. Confirm legal ability to combine.
 - vi. Verify expected organizational capabilities.
 - vii. Analyze people issues such as retention, cost and cultural fit.
 - viii. Evaluate information technology (IT) position.
 - ix. Understand variations among company units and jurisdictions.

3. Integration planning

- a. This phase establishes the blueprint for all aspects of the merged entities.
 - i. Determine what skills and competencies are needed to support the new company's business strategy.
 - ii. Identify critical people integration issues, including: retention, severance, relocation and staffing.
 - iii. Profile and assess cultural differences.
 - iv. Assess current leadership and plan for new entities needs.
 - v. Advise and counsel managers during integration process.

4. Implementation

- a. This phase executes the merger integration plan for the new enterprise.
 - i. Articulate overall business strategy.
 - ii. Provide detailed roadmap of plan.
 - iii. Develop and implement organization, workforce, and process changes.
 - iv. Clearly communicate roles and responsibilities for integration teams.
 - v. Executive sponsorship and management of implementation plan.
 - vi. Focus on customer, growth and cost savings goals.
 - vii. Continuous communication dialogue between new company's leaders and employees.

viii. Implement objective performance measures and utilize feedback.

b. It typically also measures and reports progress of the overall implementation plan and goals (2002).

There seems to be almost universal admonitions that human resource professionals are often not a part of the initial deal process. And, likewise recommendations that human resources be involved with the planning and execution of the people integration process. Human capital metrics could be useful tools, if available, to aid in the successful completion of both of these goals.

Corporate Courting & Marriage

Merger and acquisition courtships are typically made on optimistic strategic plans, the basis of which has already been discussed; it appears the actual decision is most often based on the ability of the acquisition to generate an attractive financial return. Goldberg recommends a comprehensive due diligence process to aid in the decision to purchase or not, based on an accounting review of real assets and finances (2000). M&A has historically been a financial accounting and legal process—not a decision involving human capital factors and this needs to change if merger success rates are going to improve (D. C. Carey & Ogden, 2004). The research suggests that companies approach a corporate marriage from the perspective of a financial acquisition with high expectations of revenue and profit, and give little thought of how they are actually going to live together in harmony. The decision making process must begin to cover soft issue synergies if the divorce rate is to improve (Lajoux, 1998); early trends suggest this is beginning to happen.

Human Capital Factors Explored

Theodore Schultz, who won the Nobel Prize for economics in 1979, originated the term human capital. Schultz offered the following description:

Consider all human abilities to be either innate or acquired. Every person is born with a particular set of genes, which determines his innate ability. Attribute of acquired population quality, which are valuable and can be augmented by appropriate investment, will be treated as human capital (Fitz-enz, 2000, p.12).

Human Capital In Business

Translating this description into business terms Fitz-enz offered the following insights regarding human capital:

The traits one brings to the job; intelligence, energy, a generally positive attitude, reliability, commitment

One's ability to learn: aptitude, imagination, creativity, and what is often called "street smarts," savvy (or how to get things done)

One's motivation to share information and knowledge: team sprit and goal orientation (2000, p.12).

Human capital is potentially influenced by the organized infrastructure and physical attributes of the organization in which it resides. "Organizations can be thought of as environments with a purpose"(Strange & Banning, 2001). This purpose is typically to create value for the parent organization; in business, this is commonly profit or market value. The organized infrastructure affects the operational functions, responsibilities, and line and staff reporting structure within any given organization; which in turn affects the development of human capital

Human capital can be different things to different people and companies. A broad discussion of relevant issues in various applications surrounding the topic was offered to set the backdrop for the study. Concerning human capital within a business context,

companies are encouraged to ask questions such as the following adaptive subset offered by Davenport in his (1999) research:

1. What kinds of human capital are needed most?
2. How can we recruit and hire top performers who have the critical knowledge, skills, and talents needed by the company?
3. What work environment best supports maximum effective investment in human capital?
4. What initiatives build performance capacity quickly and effectively?
5. How can we retain the best people?
6. How can an organization balance the interests of human capital and other stakeholders to achieve competitive advantage?

The answers to these questions or even the process of gaining the answers has provided much insight into what human capital and its attendant human capital factors are *and* are not.

Human Capital Business Metrics

Human capital measurements should be taken at several key points within the organization. Typically, activity should start at the enterprise level, and second flow to the business unit level, and finally to the third level; the points within the organization where human capital is actually managed. In other words, wherever we need to go to see the effects of planning, hiring, compensating, developing, and retain the enterprise's human capital (Fitz-enz, 2000). This ensures a comprehensive, multidirectional view of the organization's efforts and progress toward stated goals.

Human capital metrics should follow several general guidelines in their development and application. Davenport again offers clear and relevant insight into the general tenets of human capital metrics:

1. Any endeavor to measure human capital or its attendant attributes should adhere to several basic criteria. In general, metrics should be kept simple; avoid complex interlinked variable and calculations.
2. Count only what counts. Measure and keep track of only what matters. Measures often tie back to strategy, cost, quality, and innovation.
3. Measures should be easily understood. Anyone with a basic understanding of business should be able to interpret human capital metrics.
4. Build a compass, meaning that good metrics should point to the underlying causes and suggest action in support of performance goals (1999).

It is hard to argue with this counsel; it seems the basic idea is to step back from the day-to-day fire fighting and really take a look and what you are measuring *and* why.

As we zero in on a more finite set of human capital metrics, a table of suggested measures developed by (Davenport, 1999, p.215) may be useful to review with its overview of general guidelines. Examine Table 1.

Table 1***Suggested Human Capital Measures***

Elements of Human Capital System	Results Measures	Contributory Measures
Linkage of human capital with strategy	Improvements in key strategic capabilities Use of human capital to strengthen capabilities	Growth of human capital elements supporting key capabilities
Hiring human capital investors	Contribution of hiring to strengthening capabilities	Size of applicant pipeline, especially for pivotal jobs Percentage of top candidates hired Hiring cycle time Hiring cost
Context for performance	Unit productivity per employee Revenue per employee Profit per employee Market capitalization per employee	Employee attitudes toward each element of ROI Employee attitudes toward each of the three organization environment elements (strategic alignment, deal understanding, deal acceptance) Employee attitudes toward each of the three job execution elements (competence, autonomy, reinforcement) Levels of employee commitment and engagement
Building human capital	Contribution of learning to strengthening of key capabilities Tobin's-q People value-added	Success of teams in meeting goals Number and strength of practice communities Total training investment Training ROI Spread of training hours and dollars by position
Retention of investors	Retention of committed and engaged people in pivotal jobs	Competitive comparison of ROI, elements Turnover in pivotal jobs Position of ROI, packages relative to efficient frontier

Some of the measurements contained in the previous chart are basic and useful to most any business; some are highly technical and apply only to a select population of businesses, or perhaps a certain period in time—such as a merger or acquisition decision and forthcoming acquisition integration process. A key concept derived from this section and particularly true of knowledge based economies are that people are both investments *and* investors in the business.

Fitz-enz has developed what is termed a human capital scorecard which may lend support and additional understanding to previous discussion surrounding potential human capital metrics—that may be useful during M&A transactions. It revolves around two primary viewpoints, financial and human. Table 2 presents an adaptation of Fitz-enz's score card in two categories, financial and human.

Table 2***Human Capital Scorecard***

Financial	Human
Human Capital Revenue Revenue divided by FTEs	Exempt Percentage Number of exempt FTEs as a percentage of total FTEs
Human Capital Cost Cost of pay, benefits, absence, turnover, and contingents	Contingent Percentage Number of contingent FTEs as a percentage of total FTEs
Human Capital ROI Revenue minus (expense minus total labor cost), divided by total labor cost	Accession Rate Replacement hires and hires for new positions as a percentage of the workforce
Human Capital Value Added Revenue minus (expense minus total labor cost), divided by FTEs	Separation (Loss) Rate Voluntary and involuntary separations as a percentage of head count
Human Economic Value Added Net operating profit after tax minus cost of capital, divided by FTE's	Total Labor Cost Revenue Percentage All labor costs as a percentage of total revenue
Human Capital Market Value Market value minus book value, divided by FTEs	Employee Development Investment Cost of all training and development as a percentage of payroll

(Fitz-enz, 2000, p.46)

The Proposed Research Project

It appears that human capital metrics are involved as an actor in the merger and acquisition process; and that additional exploratory research is warranted. A general outline of the prescribed research study follows.

Statement of the Problem

As indicated by previous discussion, with the failure of mergers and acquisitions rampant, and the impact on affected people often deleterious; there must be a better way to conduct the human capital side of the M&A process. Plant closures, downsizing,

divestitures, and wage and benefits reductions are but a few of the negative impacts of some business mergers. Should some mergers go “thumbs-down” in the human capital investigative phase of the M&A process? Would the entire effort be better served with more human resources expertise on the front-end? Of course human turmoil is inevitable whenever large-scale organizational changes are undertaken; but often it appears that negative impacts are intensified by uninformed or questionable management practices. The trend is not a new one as Buono and Bowditch (1989, p.3) commented “Unfortunately, as a growing body of evidence strongly suggests, the human and organizational costs of the current wave of mergers, acquisitions, and related divestitures are continuing to mount and take their toll.”

In summary, the literature suggests human capital or people issues are the primary reason for failure of M&A transactions. Depending upon how one defines success of an M&A, the failure rates over the past 30 years run from 20 percent to 80 percent; companies are liquidated or divested about 20 percent of the time and up to 80 percent of companies fail to achieve financial goals (Lajoux, 1998). Daniel and Metcalf (2001) cite human issues of all kinds as the root cause of many of these failed mergers and acquisitions. Schmidt’s research concluded that “when M&As fail, it’s frequently because of people or related issues” (2002, p.3). Of the roughly 50 percent of all alliances that fail within the United States, in most cases attitudes and behavior of management and employees are the cause; in summary personnel problems are one of the main reasons for disappointing financial results (Picot, 2002).

Purpose of the Study

The purpose of this research study was to determine whether there are identifiable and measurable human capital metrics in a merger and acquisition environment which can be integrated in a proactive and strategic manner so as to enhance the potential success of the merger or acquisition. Research outcomes could be used to 1) enhance the M&A decision, 2) improve the due diligence process, 3) develop better integration plans, and 4) better manage the post-merger organization. Secondary outcomes of the research may include the identification of tangential human capital factors or other human dimension variables that have a broader application to business management than just during periods of M&A.

Preliminary Research Questions

This study sought answers to the following research questions:

1. From the literature about the merger and acquisition environment, are there identifiable human capital factors that should be considered?
2. According to the literature, what are the manifestations of these human capital factors that should be measured?

Bird's Eye View of the Research Plan

This study falls within the discipline of applied research, more specifically action research. Action research has several key characteristics: It tends to focus on practical issues, the researcher's own practices, collaboration between the researcher and participants, a dynamic-spiraling-iterative process, and an action plan to solve a practical issue; typically the results of the research are shared (Creswell, 2002). Every attempt was made to utilize and build upon the existing work of other scholars within an ethical

framework (Leedy, 1993). This study was a primarily quantitative design in that utilized quantitative methodologies and evolved in several distinct tactical phases.

Phase One:

1. Gain an overall understanding of the human capital factors and the merger and acquisition process.
2. This was mostly accomplished by a concise and focused literature review.
3. Due consideration was given to the nature of the problem, relevance of the study, limitations of the study, and whether or not to proceed further.

Phase Two:

1. The initial research questions were explored through a comprehensive literature review.
2. Related research was identified and explored to lend either a supporting foundation for the proposed research or if possible, an outright answer to the research questions.

Phase Three:

1. A small group of subject matter experts were identified and convened to lend knowledge and expertise to the subject under study.
2. A qualitative contextual analysis technique was utilized to coalesce, refine and confirm initial findings from the literature review (Patton, 1990). The goal was to arrive at a consensus list of human capital factors.
3. A cross-sectional survey instrument was developed (Fraenkel & Wallen, 1993). This empirical test instrument was a survey resulting from the coalesced literature review process, which is then administered to a

convenience sampling of business experts for review and input; and to provide content validity of the ‘develop your own instrument’ and potentially some level of generalizability of the study outcomes (Gliner & Morgan, 2000).

Phase Four:

1. Survey data gathered through the research process was analyzed and interpreted.
2. Analysis of survey data included computerized statistical programs such as: Statistical Package for the Social Sciences (SPSS) or similar data analysis software.

Phase Five:

1. This phase was used to coax meaning from the research data and attendant analysis and interpretation process.
2. Have the research questions been answered?
3. What are the implications of the data related to the stated purpose of the study?
4. Are there recommendations for future researchers?

Definition of Key Terms

Working definitions of the following terms are offered to aid in understanding this research project:

1. Human Capital—In 2002 Davenport expressed the basic elements of human capital by the formula: “TOTAL HUMAN CAPITAL INVESTMENT = [ABILITY + BEHAVIOR] X EFFORT X TIME” (p.22). Another way to

express this concept is to simply say it is the total human added value brought to bear for the common good of a business or other organization.

2. Human Capital Factor—Any observable attribute of human capital.
3. Human Capital Metric—Any observable AND measurable attribute of human capital.
4. Merger and acquisition (M&A)—A transaction which leads to the combination and possible integration of two companies. “Any acquisition consummated with a plan for integration of significant resources, operations, and / or technology” (Lajoux, 1998, p.4).

Limitations and Delimitations

Due to the very nature of a Ph.D. dissertation, time, money and resources in general are obvious limitations. Also, due to the relatively small populations surveyed and some of the purposeful sampling techniques; generalization of findings may be somewhat constrained. The researcher’s personal experience as an executive during M&A’s has the potential of introducing bias to the study. It is believed that peer review, dissertation committee, and a strict adherence to ethical standards of research were adequate to ensure objectivity. Specifically, the research process adhered to Colorado State University’s human research protection guidelines, the Belmont Report, the 45 CFR 46 and the Common Rule regulations.

The study was delimited to include a reasonable number of participants in the subsequent survey. Generalizability of findings were extrapolated only to the data universe of the study and emergent themes arising from the results of the research.

Finally, it may be said that the intentional, multilaterally constrained scope of the study was in itself by definition delimitation.

Go Forward Assumptions

Several assumptions were made in the preparation for execution of this research study:

1. All participants were open and honest in their responses.
2. Every effort was made to ensure anonymity and confidentiality.
3. Ethical standards of research were strictly adhered to.
4. This study has value and adds to the body of knowledge, albeit incrementally.

Significance and Rationale of Study

Quite simply, the researcher believes that mergers and acquisitions can be a valuable weapon in the business executive's arsenal. Even at this stage in the research, it also appears a priori that a better job can be done on the human capital side of the M&A process. The identification and quantification of human capital factors to produce a bank of generalizable human capital metrics may aid in evaluating the M&A decision and managing the post merge organization or potentially other businesses. If this goal comes to fruition, the dismal success to failure ratio of M&As may be improved. This could in turn save a lot a needless anguish and loss of employment to thousands of ex-employees of the failures, and perhaps smooth out the ride of the success stories.

CHAPTER 2: LITERATURE REVIEW

Strategic Overview

Mergers and acquisitions, human capital, and human capital metrics seem to cover a lot of seemingly disparate bodies of knowledge; and this rings true. The overall strategy of the literature review was to examine the current literature knowledge base encompassing these subject areas to discover existing answers to the research questions; or to gain additional knowledge and insight to create a new focused “micro-body of knowledge” about the research questions.

Tactically all known related electronic databases were searched using tailored custom search and context read capabilities for potential reference sources. Potential references are then manually read and added to the literature review discussion—or discarded as irrelevant until a point of saturation is reached. Related references were then presented in the following manner:

1. Overall structure of the literature follows:
 - a. General discussion and insight related to the research questions.
 - b. Parameters of the M&A decision making process.
 - c. Information related to identifiable human capital factors.
 - d. Measurable manifestations of human capital factors.
 - e. Summary and synthesis of the information gleaned from the literature review.

2. Each related literature review reference was added to one or more of the overall categories and then sorted into main categories stemming from the primary contribution and relationship of the work to the research questions (Galvan, 2004).
3. Each main category was bridged and summarized as needed to ensure clarity and smooth transition from one main research knowledge base to the next.
4. Main categories were added as needed and sub-categories were only used when clarity of related reference sources warrants.

The goal of this strategy was to find and organize the literature into a comprehensive and logical progression, with the completed literature review table of contents showing a quick overview of main and sub-categories of information found relating to the research questions (Light & Pillemer, 1984). The summary and synthesis section after each overall category highlighted emergent propositions and/or trends building out of the “chaos of the stacks.”

Examining The M&A Decision Process

An overview of the factors active in the merger and acquisition process affecting the decision to merge and subsequent integration is imperative to set the stage for a focused discussion of human capital factors and measurable manifestations. The literature suggests that several key areas surface during the M&A process.

Management & Ownership Issues

Managerial judgment is a key determinant when evaluating an M&A target; and it appears that based upon financial returns; a variety of factors are causing executives to

overpay (Andrews, 1999). Swiss banking executives are being influence by the M&A revolution, major restructuring, outsourcing, and a redoubled effort to focus on core business is the outcome of a study conducted by (Burrus Barbey, 1997). Executives are also influence by the dichotomy of the decision process itself; research has identified the reactive phase and the implementation phase, and attempts have been made to computer model and predict decision making behaviors (Spangler, 1995). Task, culture, and political context are three main decision drivers during the M&A process, and broadly influence the level of integration desired and achieved (Pablo, 1991).

The literature suggests that there are many reasons to decide to buy—or not buy another company; normally the reasons are not based on human capital. Sometimes the decision to buy is influenced by a company's desire to put itself on the market ("Best latin american companies: Copene petroquimica do nordeste", 2001); this article highlights best in show companies, largely due to financial performance or M&A activity. Sometimes a hasty decision to divest can be costly; Deutsche Bank's purchase and subsequent quick unloading of BT Australia left a lot of money on the table. This botched acquisition has been widely criticized in financial circle as an example of how not to conduct the M&A decision process ("Sale of the century down under", 1999).

The M&A decision process is actually made up of two perspectives, the buyer and the seller. Heffes terms the buyer's process the decision cycle and the sellers process the sales cycle and contends that they are quite unique in their viewpoints and processes (1999); and adds "it's important to see through the eyes of your clients in order to know what they want and need (p.8). If buying and selling management are caught up in inter-group conflict, collaboration will be low and merger failure rates will be high (Berney,

1985). Boards of directors are a key decision factor in the process, not only on the buy/sell, but on the management structure of the merged organization. Petrakos suggests very careful consideration be given to a centralized or decentralized board and governance system (1997).

For many entrepreneurial and privately held companies acquisition decisions are based on family (Feldman, Harman, McCarthy, Morris, & Zick, 1996). Business owners in this segment are advised to setup a decision making matrix that encompasses the family's long-term goals and wealth creation and distribution strategies before any decisions are made. For some business owners, the goal is simple to provide a place that keeps the family together while providing income. Perceived synergies and interpersonal relationships will also be strong motivators in this type of acquisition (Graebner, 2001). The entrepreneurial seller may actually take steps to block the sale if poor interpersonal fit is detected.

Managerial judgment appears to reign supreme during the M&A decision-making process. The decision process itself is influenced by inter-group conflict and other contributing factor within the complicated buy/sell process itself. Again, a lack of focus on human capital and soft issues is cited as a missing link in the decision chain. When entrepreneurial companies are involved relationship and family concerns seem to dominate the process.

Hard Issues

A study by Liu of Asian financial companies found that government regulations is driving the decision to merge (1999); some observers feel that the process is actually going too quickly and may have a negative effect on Asian markets. Even with the

changes, the trend toward modern electronic trading may do-in some of the firms.

Regulations also shape US deals; kick starting a process of merge or acquire, stock or cash, as just a few decision parameters in play (Davis, 1999). Again, retaining expert advice to wade through the legal issues is highly recommended before rendering a final decision.

A study of 11,600 acquisitions was sifted to focus on the technology subset purchased by non-US firms found that time itself was an important factor in the success of the purchase (Inkpen, Sundaram, & Rockwood, 2000). Technology companies need to be nimble and quick to market with products or they stand to quickly lose market share while paralysis by analysis is underway. Wasserstein found that when all is said and done price for perceived value is still king; the basic question of current and future worth must be answered in relation to the potential purchaser's business plan (1999).

Another role technology plays within the M&A decision process is the technological systems in place at each of the companies considering merger. About 66 percent of mergers do not deliver cost savings and revenue projections; over the long-haul about 50 percent fail and end in divorce (Hollander, 1998); a key driver in these cases is incompatible technology systems. Many executives simply do not have the knowledge necessary to understand and make technology decisions. "We went into this with our eyes closed and our fingers crossed; we really just went hell-bent at doing the whole thing--fast" lamented a materials management information systems executive (McCormack, 1995, p.20). Experience based advice, stemming from the study is that technology plays a critical role in merging two companies and can not be just an afterthought.

The due diligence process is a key factor in the decision making process and Goldberg recommends four phases:

1. Corporate structure and financing.
2. Audit of assets.
3. Inspect the ongoing business.
4. Review staff issues (1998).

If any information surfaces that may negatively affect the long-term success of the deal, both buyers and sellers are cautioned to just walk away.

Location can be a make or break variable depending upon the type of company doing the acquiring; (Joe, 1993) identified four primary types of buyers , prospectors, analyzers, defenders, and reactors. Each type was shown to correlate with location preferences as related to the home company location. Geographic location affects post-integration managerial power adjustments; typically international mergers cause power to flow away from the acquired organization and out of country, while national mergers tend to focus and redistribute management powers within country (Lorch, 1984).

In some parts of the world, regulations appear to not only complicate the deal—but actually are driving companies to merge. Technology also appears to both drive and act as a complicating factor in the deal. Time spent on the deal and a desire to remain nimble is present during the decision process. Location of buyer and seller plays a large part in some types of strategic acquisitions. The data suggests a thorough due diligence phase is needed to uncover and understand the hard issues involved in the M&A process before irrevocable decisions are made.

Soft Issues

A study out of the healthcare industry points out the need to make decisions regarding people in an inclusive and timely manner all throughout the M&A process; this is particularly true in cultures of independent professional such as physicians (Krieger, 1998). “The best mergers integrate not subjugate” (p.78), while this statement is profound on many levels, concerning people its message is paramount. Doctors want autonomy most of all, and a say in how their local healthcare system is managed (Panum, 1996). Walkington found that pre-combination phase cultural assessment was critical if the 50 to 80 percent merger in the healthcare sector failure rate was to be overcome (2000); the study suggests a 75 percent cultural fit figure as an indicator to proceed with merger. A study out of the real estate sector also agreed that people must be considered in the decision making process (“Breaking the rules with a merger: Jack white real estate”, 1996).

An interesting yet totally counter view is offered by a study of white knight versus hostile takeovers; the study concludes that aggressive, decisive management drives more value for shareholders (Carroll, Griffith, & Rudolph, 1998). Nyborg’s research also suggested hostile takeovers drive more shareholder value (1990). A study by (Eysell, 1986) concluded that takeover bids cause only a temporary increase in share price and that over the long-term financial returns were negligible when compared to similar firms. These studies present an interesting counterpoint, the result of which may be, don’t let your heart make bad M&A decisions—after all it’s just business.

Risk is a central criterion influencing the acquisition decision making process, and is a key determinant guiding decision outcome (Jemison, Pablo, & Sitkin, 1996). The acquisition decision theory model may be viewed in three phases; “the assessment and

selection of possible acquisition candidates; the pre-acquisition evaluation of, and negotiations with the possible acquisition target; and the selection and implementation of a post-acquisition approach” (p.723). (Srivastava, 1986) found that financial planners evaluated potential targets along four criteria: rate of return, variability of the rate of return, marketing fit, and operating fit; study results suggest that the financial markets reward marketing fit as a decision point considerably more than other criteria. The data suggests that executive decision makers are broadly influenced by the perceived body of risk throughout the M&A process.

Closely related to risk, is what Mertens termed backing into decisions; this study suggested that with all of the careful diligence and deliberation that M&A decisions often boil down to one key killer variable (2003). This single variable proves either so attractive or unattractive that it overpowers the rest of the decision-making matrix involved in analyzing the deal. Group decision making theory enters into organizational decision making; (Steckel, 1982) found that members will support and facilitate decisions to enhance their own utility within the organizational decision matrix.

It appears that while the focus of management is often on the hard issues that soft issues actually often largely control the M&A decision making process. Management’s tolerance to risk is an active player in the game. With all of the attention and resources focused on the decision, it is surprising that many selections and accompanying decisions are made on one overarching killer variable. Cultural and soft issues need to be more of a focus during the initial stages of target evaluation. Once a target is selected all activities must be geared to preserving autonomy and avoiding subjugation, particularly when professionals and intellectual capital intensive groups are involved. Hostile takeovers,

primarily focused on profit, actually do generate a significantly better return for investors than so called “friendly mergers;” this may be because so many mergers are mismanaged. In summary, the literature suggests that M&A decisions are multifaceted, and operate on both tangible and intangible realms; and that human capital issues are present as operators in the decision matrix.

General Discussion Regarding Human Capital

It appears that human issues are rife throughout the M&A decision making process and the subsequent integration activities; a discussion, organized by issue characteristic or organizational linkage follows.

Human Capital—Value Creation

The health of an organization is a form of capital just like any other; this interesting and seminal viewpoint is offered by (Troy, 1998). Organizations are encouraged to set up metrics that reflect the belief that intellectual capital added to health capital equals human capital. This is an interesting notion and directly ties into capacity creation. Research suggests that mergers and acquisitions may tend to lower morale and productivity, and could affect mental health in affected employees (Gemignani, 2001).

Research into capacity building posits that if human capital value is to be created, capacity must first be created (Eade & Oxfam UK & Ireland., 1997); this capacity must be created in individuals, schools and organizations. Without this prime mover, business will either have to create capacity in the workforce through training and development efforts—or fail in creating human capital value with its attendant reflection in market value. Organizations often need to enhance basic, entry level capacity of the marginal worker with training and development efforts; these efforts may be applied and measured

at the individual, group, and firm level (Hart & Moutos, 1995). Capacity, augmented with training efforts by a given organization enhance the original capacity and tailor it to the needs of a given organization; multifaceted evaluation techniques may then be applied to evaluate levels of success or failure. Lynn's research shows that not only capacity must be created and valued, but the ideas and innovations contained in the organizations intellectual capital should be measured and brought into the operational mainstream (1998). Edvinsson further clarified that there are "six phases that represent the development of intellectual capital: insights, metrics development, leadership, technology tools development, organizational technology packaging and continuous renewal" (1997, p.366). In short, don't just measure a business' worth by profits alone—also count the brains in the organization (Hequet, 1996).

The human capital approach is a fundamental viewpoint that people are investments in the business and not costs to be minimized; dollars spent on developing employees are treaded like dollars spent improving physical plant or equipment. This also implies that a demonstrable return on capital investment is expected. When properly implemented decision making is improved and human capital becomes viewed as income producing rather than income consuming (LeBlanc, Rich, & Mulvey, 2000).

Market value creation and growth, or lack thereof, is determined by many factors; the research suggests these factors are directly attributable to human capital management practices. Research has shown that what executive management focuses on tends to get done, and if you are focusing on the right things you man even create lasting value in the marketplace. O'Reilly and Pfeffer (2000) conducted a study of eight companies demonstrated the ability to consistently create value in the marketplace based upon what

they call HR levers. An adaptation of their work is presented in Table 3 showing their HR levers and the relative success checks of the studied companies.

Table 3

HR Levers

HR Levers	Southwest Airlines	Cisco Systems	Men's Warehouse	SAS Institute	PSS World Medical	AES	NUMMI	Cypress Semiconductor
Values, culture, and strategy alignment	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	X
Hiring for fit	✓✓	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓
Investing in people	✓✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	0
Widespread information sharing	✓✓	✓	✓	✓	✓✓	✓✓	✓✓	✓✓
Team-based systems	✓	✓	✓	✓	✓	✓✓	✓✓	X
Rewards and recognition	✓✓	✓	✓	✓	✓✓	✓	✓	✓

(O'Reilly & Pfeffer, 2000, p.239)

This study is included because it is recent research that shows a direct link between human capital factors and the creation of market value. It is unlikely that any human capital factors or their resulting metrics would be recommended out of the study underway that did not at least tend to support success in the market place.

The quest for fast-track business growth is driving the creation of new human capital solutions and strategies; these are primarily designed to attract staff and ensure growth objectives are met (Sherman, 2001). Several of these new solutions have been

successful in varying degrees; and are offered in the following list adapted from Sherman:

1. Open book management, a style of management that shares all key financial data with the employees so that they can better understand how their productivity has a direct impact on the company's performance.
2. The use of free agents.
3. Outsourcing of critical functions, including application service providers (ASP's) who host and support your software systems.
4. Employee leasing.
5. Telecommuting and flexible hours.
6. Other specialized strategies designed to meet the needs of a changing workforce (2001, pp.73-74).

These fundamental operating changes are having a widespread impact on organizations, human capital and its related identifiable factors.

The literature suggests that human capital value is influenced by the health and educational capacity created in the organization. Changes such as outsourcing, telecommuting, and contract labor are having a fundamental effect on human capital. Once a healthy and capable workforce is established, it seems that management practices become a key driver and critical success factor.

Management's Role

The expansion of global markets and increasingly powerful technology are accelerating demand for human capital with a high degree of intelligence and information system literacy (McGregor, 2000). Four overriding factors influence the organization

and management effectiveness. McGregor determined that people interact at several levels: personal, interpersonal, inter-group, and systemic; this vertical and horizontal integration of human capital interfaces necessitates awareness and observance of these factors in the governance of the business to gain maximum return on human investment (2000). The importance of the human capital and technology interface is not to be underestimated when evaluating systemic interaction; this interface has direct effect on execution and thus customer satisfaction (Andel, 1999).

The new business dynamic is driving changes in human capital and the way organization development efforts must be managed to be successful. Goman's research has identified five fundamental events that are driving this shifting paradigm:

1. Domestic versus global competition.
2. Manpower to techno-power.
3. Company led to consumer led markets.
4. Manufacturing to service-dominated economics.
5. Demographic transformation and shifting employer/employee relations (1997).

These changing business forces will likely have an overarching impact on human capital creation, identifiable human capital factors, and their potentially measurable manifestations.

Business strategy is immersed in virtually all that an organization plies its efforts; and people are the key actors in achieving the goals envisioned by the creators of any given strategy. Strategy operates within three key tenets: time, meaning, and soul (Gratton, 2000). Human capital factors will often be, and should be, directly tied to the

business strategy. Gratton's study makes the case that human capital will not be effective unless it is hitched to a well planned and consistent strategy; and human resources and people are going to be key levers during the process (2000). Additionally, Hymowitz stresses the need for handling management issues quickly and clearly communicating both good and bad news to gain credibility (2000). The insight here is to verify that the organizations human capital is operating concomitantly and is coordinated with strategy; human capital factors may be present to help management ensure this outcome.

Business faces three critical risk factors as it seeks to enhance its financial statement through growth: During a merger or acquisition, crossing an international border, and expanding into a new market (Gallagher, 2003). At these times corporate culture and its underlying value structure are most vulnerable to negative change. Manifestations of culture and values are embedded within human capital factors; and this combination is what embodies the uniqueness of some of our most successful organizations. Gallagher highlights Southwest Airlines, Dell, and Wendy's being just three examples of companies whose culture plays a significant role in their human capital and resulting market value (2003) .

Entrepreneurial cultures must be respected if small and mid-market deals are going to be successfully consummated; often these types of companies will have very powerful and unique ways of doing things (Sklar, 1996). A suitor who neglects the strongly held beliefs and traditions within this type of company will likely barely make it past the front door. Establishing an initial basis of trust and mutual respect will often carry the day in this type of environment.

Executive management is using mergers as a strategy to drive corporate growth to more effectively compete in the global economy. Tactically, this strategy implies risk due to stresses placed on technological and human systems. At times management seems unwilling or unprepared to acknowledge underlying human and inter-organizational cultural issues that result from M&A strategy.

M&A—Change Agent

A first rule of M&As is to ensure you have a good organizational fit if you are to attempt integration; however, this rule is frequently dismissed in the search for a new market or technology (Legare, 1998). Once the decision to proceed is made Legare cautions management to expect a variety of responses, some based on early childhood and engrained psychological patterns that have little to do with the integration—but will have a major impact on its outcome (1998). Shillaber found that M&As can be viewed as a normal part of the organizational lifecycle; and that the merger occurs within three merger phases: 1) pre-combination, 2) legal combination, and 3) post-combination (1989). Traditional management approaches focus on either the individual or organization, rarely on both or in a comprehensive and integrated fashion as the study recommends. A study within the aerospace industry found that human resource practices had a major impact on the human factors of production (Huseonica, 1984). Furthermore, employee attitudes, motivation and participation in the work environment were shown to interrelate with technology and business practices.

Astrachan's research has identified separation anxiety is an emotional response that accompanies perceived loss (1989). Anytime a merger is suspected or announced the constituents of the organization become uneasy and demonstrate symptoms of separation

anxiety (Joseph H. Astrachan, 1990). In relationship to the study underway, this effect may have direct bearing on discernable human capital factors. The influence will likely affect all levels and group within the organization and have a deleterious effect on performance. Resistance to change during the M&A process will often be observable in the form of anger, anxiety, conflict, avoidance, withdrawal, and denial. Astrachan makes the recommendation to closely monitor these human factors; and to be sensitive to managerial/employee relationships (1990). It appears that the softer, less measurable human capital factors can also have an effect on the overall success of the business consolidation and a wakeup call for top executives involved in the change management process.

Relatively few original systematic studies of the effects of mergers and acquisitions on employees have been conducted (McGuckin & Conference Board., 2001). McGuckin has conducted research into the area and found that overall M&A has a positive impact on employees—the key caveat is the employees who remain. Lurey’s research concluded that M&A is also having a largely negative effect on virtual teams due to layoffs and dispersal issues (1998). A key takeaway from this study is that executive management should do their best to reinforce the positive aspects that employees may be expected to derive from the consolidation, without building false expectations. With this knowledge it may be that there are human capital factors that could be measured to “prove” to employees that they are indeed benefiting from a given merger. General Electric utilizes a propriety system they call Pathfinder to minimize the effects on employees and increase the likelihood of M&A success (Stopper, 1999). Pathfinder includes a comprehensive 100 day integration plan that defines key roles

throughout the transition team. Managers are encouraged to tell the truth, yet relay information in a supportive way to affected groups. Stopper highlights two key elements of the GE plan are the 100 day plan and a full-time integration manager as worth noting for other companies involved in M&As (1999). On the downside, Davies conducted a longitudinal study, with a one year time base and found that morale was still markedly down and perceptions of local management practices up (2003). Employees were still in the grip of fear over uncertainty generated by the merger.

Once a merger is announced people within the organization begin reacting; it is up to management to recognize the symptoms of organizational unrest and anxiety and take the appropriate and preferably proactive steps to move the organization through the change process. Data suggests that this can be done with appropriate planning and continuous communication and dialogue with employees.

Identifiable Human Capital Factors

General Human Factors

Gender is a factor in mergers and acquisitions, consolidations almost by definition, require a collaborative environment; in this environment women can really excel (Cox, 2001). However, this study shows that women must also overcome a reluctance to be assertive, when to be compete and when to cooperate is a key factor in success. Cox found that women are making progress in the pharmaceutical industry; from 1997 to 2000 they have gone from 8 percent to 13.8 percent (2001). Merger and acquisition activity has created promotional opportunities for women ("Women face obstacles and opportunities in turbulent healthcare job market - part 1 of 2", 2001). While women have made considerable gains, there is much work to be done, women

have not attained anywhere close to gender equity ("Women face obstacles and opportunities in turbulent healthcare job market - part 2 of 2", 2001).

Psychological preparedness of the workforce can be a significant factor in the process. Katz organizes the discussion in three phases 1) pre-combination, 2) combination, and 3) post-combination (I. Katz, 1998). Companies that wish to maximize the potential for organizational success should follow four basic objectives:

1. **Insight.** People need to be aware of the reality of combination-related stress and to be given lessons and guidance on how to control it.
2. **Inspiration.** Leadership needs to make an intellectual and emotional case for why people should let go of their customary ways of thinking and working and accept those of the new organization.
3. **Information.** Leadership needs to keep employees informed about the combination's purpose, promise' process and progress.
4. **Involvement.** Leadership has to find ways to get people to feel more like architects of change and less like victims (I. Katz, 1998, p.130).

The research suggests that M&A activity causes a cultural gap that many members fail to keep pace with (Roussel, 1990); this gap between the organizational and corporate culture is thought to drive many of the cultural and psychological issues involved in integration attempts.

Ethical concerns are being raised by the health care industry. Another factor to be weighed when conducting mergers and acquisitions is are they ethical? Injecting profit as the primary motivator in healthcare may not be a good thing (Rubin & Zoloth-Dorfman, 1996); injecting much needed capital and management expertise can have a

positive effect if used in the best interests of health care stakeholders. Another viewpoint is that consolidations within the healthcare field is having a negative effect on healthcare due to staffing reductions, and just when aging baby boomers need quality care most (Curtin & Simpson, 2000). M&A activity is creating a rise conversion foundations; ethical questions a becoming a topic of discussion for the boards of directors (Orlikoff & Totten, 1998). The Pennsylvania bankruptcy of Allegheny Health is helping to fuel a regulatory oversight fire; the view being offered is either act ethically or states will legally force ethics (Shur Bilchik, 1999). Consolidations within the insurance industry in general are having a positive impact on stakeholders, due to increased size and profitability; on the downside is decreased competition and vendor choices for the insurance customer (Bradford & Prince, 1996). Ethical concerns seem to come from a primarily academic viewpoint concerning M&A issues and at this point are not viewed as having a major impact on deal strategy.

Mills brings forth an interesting factor to consider during the M&A planning phase; is consolidating multiple professions under one roof a good idea (1999)? The discussion involves accountants and lawyers; and general counsel is that the two professions have very different cultures and integration may bring forth more issues than it solves. Economic pressures on both groups will likely force the issue in the not-to-distant future.

Many organizations are psychologically unprepared for the merger process; often the pace of change is more than most people can keep pace with. Complicating the integration process are human factors issues arising from gender, ethics, and different

professional areas. All of these issues need to be surfaced and dealt with or they can and do undermine the integration process and ultimately the success of the M&A.

Management Strategy & Execution

International competition and mergers and acquisitions top the list of the five most critical business issues today (Rappaport, Bogosian, & Klann, 1998); also on the list were technology, changing employee expectation about work, and employee recruiting issues. A survey of 656 Chief Executive Officers found that 30 percent of the respondents spent some sleepless nights wondering how to manage mergers and acquisitions ("What ceos are worried about", 1999). This statement is not surprising with the dismal track record of successes in M&A transactions. A roundtable of 11 experienced CEOs agreed that growth and penetrating new markets was a key strategy motivating M&As; however this group downplayed the importance of culture and found cost cutting and consolidation was a key tactical imperative (D. Carey, 2000). The strategy of growth and size may not bear the fruit CEOs hope for—unless quickness can be retained ("Sizing up the merger mania", 1997); size and speed are generally key competitive factors in most marketplaces and geographic regions.

Chief executives may be bringing some of the trouble on themselves by a lack of attention on the softer issues (Thompson, 1997); contributing to the problem is a human resource community that is sometimes ill-versed in speaking in financial terms. The good news may be that CEOs awareness can be raised with a well planned organizational intervention process (Bodam, 2003). Establishing a common ground before the flurry of activity created by the M&A process is highly recommended. Gandell recommends implementing a unified human resources model to avoid the 60 to 80 percent integration

failure rate (2001). An interesting and perhaps unsettling strategic perspective is offered by (Greer, Youngblood, & Gray, 1999) in that one strategy sometimes employed in the overall M&A strategy is to downsize or even outsource the entire HR group; perhaps a 21st century variation of last HR guy out turn off the lights.

Schmidt conducted a study of 447 senior human resource executives and found that when HR was involved early and in a significant manner, M&A success rates were substantially higher (2001). In the pre-deal phase HR was involved 21 percent of the time in successful deals and only 12 percent in failed deals; involvement in the due diligence phase was higher at 72 percent successful and 39 percent failed; involvement in implementation phase was 87 percent successful and 73 percent failed (Schmidt, 2001). This study clearly shows the importance of inviting HR to sit at the deal table as a full-strategic partner. Without HR involvement executive dealmakers are much more likely to be deal-breakers. A study by The Conference Board showed that less than 1/3 of human resource groups have any real involvement in the planning and negotiation stages of the deal; yet 80 percent of the HR officers agreed that human factors played a critical role in the successful outcome of the acquisition (McShulskis, 1998). ("Hr issues neglected in merger/acquisition planning: Survey", 1997) agreed with these findings and added that financial and marketing concerns drive deals; the human aspect is a secondary concern.

Another study conducted by the International Labor Organization (ILO) showed that two-thirds of mergers failed to achieve stated goals; the most identified reason for failure had to do with management's complete lack of focus on human factors and integration issues (Leonard, 2001). Greengard has found that companies can actually

accrue fines or loss of workers due to compliance issues if HR isn't involved in the due diligence process (1999). This is particularly true in the compensation and legal compliance areas of M&A. Management must focus on clear and consistent communications from the top and implementing company policies quickly to avoid confusion and jeopardize success (Jaleshgari, 1998).

In the graphics industry Cornell found that careful selection of the acquisition target was crucial, along with a demonstrated track-record of customer service if the deal is going to succeed (1997). The concept of minimal integration was explored; sometimes it is best to do a financial acquisition and let existing management keep running the company. If more management won't add more value, they why try? The power transmission industry is also exploring ways to minimize workforce numbers and costs when consolidating by leveraging the internet ("Power transmission outlook: Consolidation pace slows in pt sector", 1999). The real estate business sector has similar concerns; on one hand the customer wants size and reduced cost, but not at the expense of local people based service (Anderson, 1999).

Management in the banking industry was encouraged to conduct a pre-due diligence audit of their bank prior to offering it for sale (Martin, 1998); top dollar will not be realized if pre-sale conditions are not met. This is an interesting perspective on due diligence and should be headed by selling executives in all business segments. Final guidance, if your business is not ready for sale—then don't put it on the market. After the sale issues are plaguing the banking industry; Mason found that customers may migrate away from the larger, merged banks due to increased fees and a perceived lower level of customer service (1998).

School systems are getting into the merger phenomenon; (Reddyk, 2000) found that the amalgamation of educational institutions echoed characteristics of M&As. The study recommends “that an organization's components of mission and strategy, structure, and human resources be aligned within the technical, political and cultural systems of [the] organization” (p.3649). Three iterative process phases were identified: 1) process endings, 2) the neutral phases, and 3) new beginnings; within each of these phases clear and consistent communications was prescribed. (Skiba, 1999) found also found that educational organizations behaved in manners similar to merging business organizations; loyalty was found to be present in an inverse relationship to the amount and types of change the organization was encountering.

Top executives must design and implement effective transition structures; (Marks & Mirvis, 2000b) recommend a three tiered approach comprised of the following: 1) Senior leadership steering committee, 2) transition managers, and 3) task forces. The intent of the structure is to create a clear and consistent linkage with management throughout the organization, and to effectively communicate critical success factors to all constituent groups. Marks and Mirvis conducted additional research into transition teams and found that the teams must have clear charters and guidelines. When transitions failed under this structure, it was typically because the teams did not know what was expected of them or the authority they had to accomplish their missions (2000a). Bentley agrees and also recommends a three pronged approach: 1) Appoint a business manager, 2) involve a seasoned corporate developer, and 3) retain experienced M&A legal counsel (1996). Often rather than create effective transition teams, executives lock themselves up in a war room and create a crisis mentality around them; management need to be

accessible to employees and openly communicate what is happening (Marks & Mirvis, 1997a).

Merger syndrome is name given to a disease caught by both management and employees during the M&A process (Marks & Mirvis, 1997b). The syndrome begins appearing shortly after the deal is announced, and the contagion can linger well into the consolidation phase; increased hostility and withdrawal are two key symptoms. Attempts at inoculation include vibrant communications program involving not only the business impact of the transaction, but also the personal impact. Emphasis should be given to helping people see that there is a positive side to the consolidation. Employee venting meetings and demonstrations of Executive empathy can be used to bond employees into aligning with vision of a new business culture.

Management strategy and execution begins with seller readiness; the research suggests that most sellers are not ready to be purchased. Global competition and rampaging technological advances are driving management into a feeding frenzy, to the point where schools and not-for-profits are getting into the game. In general, it seems fair to say that management is doing a poor job of conceptualizing and planning to the soft-side of integration to the point where the human capital gets “sick.” The sickness is often termed “merger syndrome;” recognizable human attributes include withdrawal and hostility. Management must plan and execute well thought out people focused integrations if their growth strategies are to succeed.

People Factors and Due Diligence

Canadian Manager stressed the fact that M&A success is largely dependent on the people involved in their article ("It's a "people" thing: Mergers & acquisitions don't

have to fail. Here's how to avoid a disaster", 2003, p.23); and further offer the following human capital factors be reviewed during the diligence process:

- * Employment contracts
- * Bonus plans, deferred compensation, stock options
- * Pension plans and documentation
- * Wage and job rates
- * Organization chart
- * Benefits coverage
- * Contracts, agreements appraisal and any outstanding litigation
- * Short-term and long-term disability claims
- * Patents, copyrights and license agreements held by employees
- * Non-compete clauses
- * Leasing or purchasing agreements for automobiles, cell phones and pagers.
- * Any outstanding or anticipated employment related litigation
- * Employee policy manuals
- * Current and historical performance ratings for all employees
- * Evidence of any union activity

A second report out of Canada by Smeenk recommended that the legal factors surrounding employees involved in the sale be carefully considered and expert counsel be retained (1998). The uninformed may bear legal and financial consequences overhanging the organization for years if missteps are made.

Much of the guidance is focused on retaining key talent; another viewpoint stemming from experience with a tight labor market, is how to recruit sufficient

managerial and technical talent to run the new enterprise (Friedman, 1998)? This guidance stems from the insurance industry and its accelerating merger-mania, and Friedman believes that the talent wars must be won if the business plan is to succeed. A second study out of the insurance industry agreed that retention of principals was critical, but added that retention of and the ability to effectively manage the added customer portfolio was just as important (Brainin, 1998). In the financial sector most key employees are subject to employment contracts, which can be a double-edged sword; however, in any transaction the retention of key value producers is paramount and an objective review of contracts and compensation can offer a lot of insight toward this goal ("Employee retention essential for financial services mergers", 1997). In closing, the author offered a hard to argue with viewpoint, that competitive compensation programs go a long way toward retaining employees.

AT&T's disastrous hostile takeover of NCR in 1991 brought home two critical deficiencies in a heretofore sound M&A plan: 1) thorough due diligence is critical, and 2) retaining key talent is paramount (Chaudhuri & Tabrizi, 1999). It is further suggested by the research that if these two goals are not accomplishable—do not even attempt the acquisition, because it will almost certainly fail anyway. Proper research on the front-end of the deal is designed to ensure you are buying what you think you are buying; and strong retention management will tend to keep your intellectual capital in your organization. Tyco International Ltd's experience of 110 acquisitions shows that people are a key component of the value chain in a deal, and if the people flee your value can drop overnight (Schultz, 1999). Objective, third party assessments of current key talent and potential superstars is a part of current deal methodology. Another factor in the mix

can be time, the general guidance is to transition quickly—but sometimes taking things slowly as was the case in pharmaceutical companies mergers (DeFilippis, 1999). The goal was to let people digest the new situation a bit before injecting even more change.

M&A's success rate is not only influenced by human capital, it is further dependent upon the type, intensity, and shared expertise of human capital involved (Coff, 2002). The study went on to show that business deals with shared expertise were structure differently than those without intellectual capital in common. This research suggests that human capital factors related to shared intellectual capital do have an impact on closing the deal and long-term success. Intellectual capital resides in the minds of key talent; and it is very common during consolidations that key talent votes with its feet and just walks away. A study of 53 high-tech companies found that only 11 were viewed to be successful by both sides, this dismal figure was largely driven by whether key talent remained in support of the new organization (D. M. Katz, 2000). Earnouts are sometimes used to adjust value expectation during the deal phase and ensure that key managerial or technical talent remains. Often earnouts work for the benefit of both parties and have been shown to be a stabilizing effect on the new organization during integration, and support M&A success (Kohers & Ang, 2000).

Increasingly, culture is a factor in merger and acquisition planning, yet only 34 percent of HR groups are involved in an up-front cultural clash assessment (Greengard, 1999). Galpin suggests that cultural differences affect the way deals are done and how participants react to changes. The research suggests adherence to three elements 1) comprehensive due diligence, 2) enterprise wide integration, and 3) lastly human capital integration. Cultural and other differences can create a type of tunnel vision that can

exclude or rush through important aspects of diligence (1999). Mozeson and Gretchko concur, inter-company cultural considerations are a key component of the M&A process (1998); as the employee members of the blended culture will be the ones to implement the vision of the new business.

The human factor is particularly critical when companies of different nationalities are merging ("People matter most in mergers: UK", 2000). This report out of the United Kingdom further suggests that people managers become more forceful in selling their cases to ensure they get in on the merger process early. Global automobile producers are increasingly suffering the effects of multicultural inefficiency ("Suppliers: Address 'people' issues", 1997); command-and-control versus extended enterprise management styles are also embedded cultural factors when crossing international borders. Asian companies are also getting in to the M&A craze; not surprisingly the issues recounted in the article, with some exceptions, closely parallel their western counterparts. Pang stresses several key issues in Asian consolidations:

- Saving face is important
- Lay-offs are undesirable
- Strong unions are in place
- Strong cultural differences may exist between countries
- Titles are precious
- Status-symbols, cars, housing allowances
- Compensation comprises base and many, many allowances
- Labour laws are protective of employees
- Marriage guidance for mergers

- Co-operation and leadership(2000, p.17).

A study of M&A practices in the People's Republic of China by Pasceri found that Asian cultures tend to get hung up on the numbers and often overlook cultural and people issues (1998). Interestingly, the study found that American and European managers are more respected than native Chinese in garnering respect and driving organizational change efforts. It seems people are more alike than different, particularly when mergers and acquisitions are underway. However, business law and custom within the eastern and western cultures is quite different—expert guidance is highly recommended.

Technology changes during the systems integration phase can have a significant impact on people; employees with out-of-date technology skills or experience with the wrong system may find themselves out of work (Lu, 1998). The antidote to unemployment is a flexible attitude and plenty of training in transferable technology skills. Increasingly, technology enabled by the internet is having an impact on people and M&A strategy ("Power transmission outlook: Consolidation pace slows in pt sector", 1999).

In summary, a focus on people factors during due diligence appears to be critical. Often due diligence is focused on numbers with a dollar sign in front of them, and whole areas of critically important information is overlooked. Diligence must be conducted and plans laid to preserve the intellectual capital and key talent of the acquired company. Technology and culture are found to be complicating issues, particularly when international borders are crossed.

Post Acquisition Integration Issues

Selecting the right people as members of the integration team is paramount if the integration effort has a prayer of success; HR managers must play a proactive role in this process (Walker & Price, 2000). Care must be taken to facilitate an alignment of people systems to promote commitment and concomitantly performance within the organization. With M&A failure rates running as high as 60-70 percent; it is critical that management get employees aligned with the new vision (Paterson, 2000). Patterson holds that companies must make employee buy-in a top priority and offers a threefold plan to help ensure alignment: 1) Create a compelling picture of the organization's future, 2) how that affects employees, and 3) how they can become a part of the new mission (2000). A study out of Sweden found that ambiguity is often glossed over by management during the integration phase of the M&A process (Risberg, 1999). Many integration issues can be mitigated and success seeded when a basis of trust is established; "Trust leads to truth, truth leads to communication and communication leads to competitive advantage," ("Current affairs", 2000, p.208)

People issues are all important during the integration or consolidation phase of two companies; these people issues often fall under a broad umbrella. This report focuses on three areas: 1) The retention of key management, 2) retaining and motivating key producers within the acquired company, and 3) retaining enough autonomy to be able to effectively run the now division of a larger organization (Humrickson, Reddin, & Marshall, 2000). In the high-tech industries like Quantum, a leading manufacturer of disk drives, time to market is critical as product life cycles are just 9 to 18 months. A key component of Quantum's M&A integration plan is time, people integration factors should

be shortened to minimize the dreaded waiting game, which can be entropic to the organization and sabotage long-term success (Barber, Huselid, & Becker, 1999).

Whether time to market is critical or not, companies contemplating merger are encouraged to consider employees first and conduct cross-cultural assessments before trouble arises. Proactive cultural assessments can be used to identify and isolate cultural differences and synthesize a new inclusive rather than exclusive post-merger culture (DeVoge & Spreier, 1999).

Bramson agrees, and suggests adding to the list by conducting a thorough review of compensation and benefits, a cultural assessment, and developing a comprehensive communication plan (2000). Executives need to communicate with HR regarding the types of transactions being contemplated; stock versus cash transactions can have a serious impact on benefits rollovers, and ultimately on employee morale if poorly handled (Pruter, 2000). Merrick strongly suggests gaining professional expertise by hiring consultants to consolidate benefits plans during the merger process; and advocates checking with other companies for references prior to signing the consulting contract (1999). M&A consummations may be having a positive effect on health insurance costs; increased size and economy of scale benefit often exert downward pressure on prices (Nirtaut, 1997). The Internal Revenue Service is making it easier on business by cleaning up and clarifying some of the rules; health coverage rights under COBRA and other regulated benefits now have clear seller/buyer responsibilities (Thomas, 1999), which previously had not been the case. Another issue sometimes not given an adequate review is the pension plan; the Pension Benefit Guarantee Corporation (PBGC) is the enforcement wing and aggressively enforces full-funding of pension plans (Gigot &

Hassel, 1997). Organizations often use Financial Accounting Standards Board (FASB) guidelines in setting up plans which can under fund liabilities by as much as 30 percent compared to the more conservative approach of the PBGC. In addition to cultural issues, international mergers can bog-down create a quagmire of overlapping regulations and plan requirements (Potgieter, 1996).

On the positive side, a business consolidation may be an ideal time to reengineer the corporate benefits structure and enhance offerings to employees; improved economies of scale are often possible with increased employee counts and larger payrolls ("The place for benefits in hr reengineering", 1998).

Hewitt Associates LLC conducted a survey of 218 companies with 1,000 or more employees and found that 69 percent of the companies found integrating organizational cultures to be the most difficult challenge during the M&A process ("M&a glitches still a culture issue", 1998). Cultural issues was cited by 55 percent of respondents to the survey in this study as the number one integration problem to be overcome ("When companies collide: What works. And what doesn't", 2000). In addition to culture this study recommends clear, consistent, and constant communications as a key goal of the integration process; without it the integration effort is likely to fail. While HR management was involved less than one quarter of the time in integration planning sessions, they were none-the-less expected to achieve a successful integration. Another, partially disagreeing study, determined that HR staff were involved in pre-merger cultural assessments 70 percent of the time and had devised plans for communicating cultural integration plans to employees ("April poll results: Mergers & acquisitions", 1999).

Hewitt Associates surveyed 140 European organizations and found that 75 percent cited integrating organization cultures as the greatest challenge facing them in the M&A process ("How to tackle people management post m&a's: Europe", 1999). A full 70 percent of the European organizations have plans underway to create a new unified culture. CGU Insurance located in the United Kingdom was cited for excellence in the M&A process based on two factors 1) the sharing of information and communications during the process, and 2) a focus on identifying and resolving cultural issues. This award highlighted the need to focus on people issues and get HR involved early in the game ("United kingdom: Cgu insurance wins hr excellence award for 'excellence in mergers and acquisitions'", 2000).

Another cultural difference to be accounted for in the M&A process is cultural differences related when the member was born; the Net Generation or those born between 1977 and 1997 will definitely be noticed (Alch, 2000). The Net-Gen is the first generation growing up with the internet and is much more tolerant of change than previous generations. They are not afraid of hard work, as many have held part-time jobs while growing up; on the flipside they are less trusting having watched their parent get laid off, down-sized, merged and acquired on a regular basis. Alch cautions, as this generation enters the business world wise management will take note of there makeup in the population and plan integrations strategies accordingly (2000).

Unions have a strong influence on company culture. Unions can add another place setting at the negotiation table; the advent of the mega-union facilitated by the merger of International Association of Machinists (IAM), the United Auto Workers (UAW), and the United Steelworkers (USW) creates the ability to effectively deal with

even the largest international conglomerate (Clark & Gray, 2000). The ramifications of unions sitting at the deal table could be impactful; the pace of deals could slow; job security will likely move closer to the top of the list; compensation and benefits reviews will be more thorough; and plant closures will be much more difficult. Getting a union culture excited about the new combined organization's vision could be problematic.

A study originating in the research and development and technology sector highlights the importance of successfully integrating the intellectual asset portfolios of the merging companies (Slowinski, Rafii, Tao, & Gollob, 2002). The authors go on to cite that 70 percent of the M&A transactions in this sector fail to meet financial goals, largely due to people factors and either a loss of or reduction of key intellectual assets. Key intellectual assets of all types must be successfully integrated into the new organization to avoid a degrading of intellectual capital and a subsequent loss of productivity and business valuation (2002).

Post acquisition integration issues are many-fold, and can have a very negative impact on the consolidation process. Employee buy-in is paramount; employee buy-in is gained by involving people throughout the process and minimizing ambiguity of mission. Buyers must remember that the purchased company must have the ability to manage itself and be productive—at times it appears that cost cutting sacrifices long-term productivity. On the positive side, a merger can be a great time to improve compensation and benefits, and consolidate the intellectual capital portfolio of both companies to competitive advantage. Culture, nationality, and union involvement may be impediments to organizational integration and fluid change. The literature suggests that human capital factors appear to be active in the M&A process.

Measurable Manifestations of Human Capital Factors

Mayo's research suggests that "in a numbers-driven business culture, while we are good at measuring people as costs and resources, we still have not accepted way to value people as assets" (2001, p.1). People are mobile, subjective, variable, and changeable; which makes their measurement difficult and often lose out to the financial side of the house with its apparent credibility and accuracy. However, as market value of intangible assets grows, these calculations will need to be undertaken and become standardized (Mayo, 2001).

Human Capital—Metrics of Growth & Value

"The long view of economic history teaches us that people are the master economic resource" (Carnevale & American Society for Training and Development., 1983, p.51). From a bottom line viewpoint growth accounting techniques may be used to isolate human capital factors from other value producers in the organization. Carnevale shows that as knowledge is injected into the production process production increases; and that as worker motivation increases there is a significant, corresponding increase in production and human capital value (1983). If you want to increase worker motivation tie business metrics to a variable or nimble pay plan (Schuster & Zingheim, 1995). Human capital investment may be tied to priorities and results through a model developed by (Afarin, 1994); the model was found to be very dependent upon the quality of data input.

DiFrancesco argues that human resources as we know it today will be outsourced within 10 years; and directs that human capital management and its attendant newly established metrics will become commonplace ("Can hr metrics really matter?" 2003).

This bold prediction also predicts that stock analysts will include human capital analysis before establishing target stock prices.

("Human capital measurement: The centrality of people to knowledge-intensive organizations makes it important to measure the roi on human capital. A new metric is designed to help", 2004) is a research article which introduces a human capital value metric. This metric was developed in and for knowledge intensive businesses such as research development. Basically, this metric builds on existing human resource accounting techniques and adds actuarial and economic principles to the mix. Individual cost and future contribution margin are analyzed to present a dollar figure of predicted value creation. The method may be used to find key value producers and value analysis for an entire company, considerable resources must be utilized in the calculations.

Intangible assets like human capital should be measured along five continuums to ensure the capture of full value. Rylatt reports the five common areas analyzed to report intangible values are:

1. Customer capital attempts to value the nature and quality of customer relationships, customer satisfaction rates, customer learning, involvement and improvement in decision-making and consultation.
2. Human capital is a measure of the know-how of people in an organization. Enthusiasm and commitment indicate human capital is working in your favor.
3. Intellectual capital constitutes listings and perceived values of trade marks, patents and branding.

4. Relationship capital involves important strategic alliances, collaborative relationships, business partnerships, joint ventures and industry associations that could help build your reputation.
5. Systems performance explores how systems and processes directly or indirectly benefit or generate improved know-how. Measures can include how practices are improved (2004, p.50).

Traditional accounting measures of human capital valuation are outdated; management needs to think of broader ways to measure the contribution of the organization's employees.

Training and development activities can have a positive impact on human capital effectiveness and value growth. Coverstone's research found that companies typically do not measure training ROI and strongly suggests that training investment be linked to the overall mission (2003). One study concluded that data envelopment analysis techniques were no more effective than traditional techniques when used to measure training investment return in the transportation industry (Ryan, 1994). Crutchfield showed that training could be measured along several factors: Turnover, absenteeism, safety, non-financial, quality, and attitude (2000). One aspect of the study examined return on investment (ROI) as a primary indicator of training effectiveness; this concept could be a potential human capital metric and have relevance to the study at hand. Typically, ROI calculations on what might be termed soft dollar investments, are hard to correlate to dollar figures; nevertheless in some organizations an attempt at this calculation is required to justify the training budget (Crutchfield, 2000). Training staff should also be measured to determine proper allocation of training resources; to high a ratio may

indicate a company is ill prepared to deal with a changing business environment and too low a ratio may indicate a staff-heavy condition. ("Saratoga's metrics help you compare training staff ratios", 2001) research determined a median level of 283:1, or one training FTE for every 283 target employees. Training may have ancillary benefits as well. From 1990 to 1998 the transportation industry had an 80 percent turnover rate. Augello found that cross-training programs can help reduce turnover and defend against untimely skill loss (1998).

There seems to be universal agreement that human capital is valuable to the business, however, little universal agreement exists as to how the soft asset should be measured. Increasingly, efforts are being made to quantify the financial contribution and overall value of the human capital segment of the business. Training ROI has been the historical leader in this effort—but few financial people get very excited about this as a comprehensive human capital metric.

Due Diligence Or Else

Organizations conducting M&As must not only have a core competence in the transaction process, but must also focus and have expertise and the integration process. Mergers and acquisitions, if they are to be integrated successfully need to concentrate on key issues related to employees. Several key areas to measure the success of a business integration are: Employee retention, employee satisfaction, and speed of integration ((Gates & Conference Board., 2000). This study focused on key employee issues in representative companies during the M&A integration process that had a critical effect on the success of the venture.

Cultural integration is continues as a critical issue (Finck, Timmers, & Mennes, 1998); cultural issues and employee satisfaction should be measured through an objective survey process to gauge where employee issues are. This process, if done correctly, will help correct problems before they become epidemic and threaten the merged culture.

If companies do not have a core competence in M&A, they can hire consultants to help facilitate the process; in some transaction additional expertise is absolutely critical to protect the entities involved ("Consultants speak out: Part 2 of 2", 2000). Issues can arise in the form of key executives leaving and taking key customers, companies backing out of deals late in the game, or other improprieties have a serious negative impact on the business.

One study in the hotel industry suggests conducting a human capital assessment; this process is primarily designed to ferret out the true value of an acquisition candidate prior to closing the deal. Dingman recommends conducting a human asset appraisal at the same time operational audits are conducting; often this process can be concluded in two or three days and can provide very enlightening information (1998). A human asset audit can prevent overpaying or quite the contrary—walking on an attractive, yet seemingly overpriced deal.

A 1999 survey of 180 companies found that one-half failed to focus on key workforce issues, and nearly all had problems managing the human aspects of the transaction (Leonard, 1999). Hanson has also conducted research into the M&A transition process and found that it is critical that a human resources due diligence review process be conducted along with other diligence activities (2001). While this research includes both human capital factors and metrics, it has been included with the metrics

section because of its relevance and potential for measurement. The following list is a subset-adaptation of a comprehensive HR due diligence list based on Hanson's research:

1. Benefits programs and experience.
2. Compensation:
 - a. Bonus and incentive plans.
 - b. Wage and salary plans.
 - c. Annual payroll.
3. Critical soft facts:
 - a. Reputation on the street.
 - b. Senior management interviews.
 - c. Employee satisfaction.
 - d. Knowledge of business challenges.
 - e. Workforce competencies.
4. Employment and third party claims.
5. Union and/or wage and hour claims.
6. Employee retention:
 - a. Turnover statistics.
 - b. Training programs.
 - c. Employee survey results.
 - d. Succession plan.
 - e. Promotion statistics.
7. Labor relations:
 - a. Union organizing efforts.

- b. Grievances and strike history.
8. Policy and safety:
- a. Code of conduct.
 - b. OSHA logs.
 - c. Worker's compensation claim and cost history (2001).

With this work stemming from the M&A environment and having at least a partial focus on human capital factors it seems likely that at least some of the items on the list will be a part of the final outcome of the study and may bear potential for measurement.

The due diligence phase is where most human capital measurements are undertaken during the M&A process. Comprehensive lists are available to gain insight into the traditional human resources view of human capital. Most studies are once again concluding that there is an overemphasis on numbers and dollar signs, with a pervasive inattention to people, culture and soft issues in general. A prescriptive takeaway is that if insufficient expertise exists in-house to conduct the due diligence; then hire a knowledgeable consultant. A good consulting group can organize the due diligence process to ensure a comprehensive view of the target is obtained, and ensure a proactive good-fit analysis is conducted.

Human Capital Management

Mayo's research has found that it is often with great reluctance that many human resource professionals engage in measuring human capital; somehow describing people in terms of numbers is viewed as lessening their intrinsic worth (2001). This view must be changed so the extrinsic value of people can be calculated and championed by the profession. (Murphy & Zandvakili, 2000) echo this sentiment and posit a system of

comprehensive metrics that primarily use established finance and accounting methods in new ways, by tying human capital metrics to business strategy through return on investment (ROI), internal rate of return (IRR), and net present value (NPV) calculations. This approach puts human resources on firm footing when competing with other departments for capital and other resources. To put the shoe on the other foot, financial professionals are encouraged to integrate with other functional departments like marketing to help generate profit, and not just focus on measuring factors such as: minimizing working capital and return on assets (Harris & Springsteel, 1997).

Sometimes human resource departments implement measurements that glorify their department, rather than tie-in strategically with business goals. For any business to have a base of human capital, it must be recruited and retained; human capital metrics should start in this critical area (Donnelly, 2000). A key factor within this metric is the need to measure churn or short-term turnover; this type of turnover is an expensive cancer that eats away at the foundation of the business.

Human capital management must be linked with customer relationship management to effectively be able to strategically plan (Blodgett, 2000). Once this link and its accompanying metrics are established within the company human capital decision can be made proactively in support of customer requirements.

Stamps suggests that human capital must be measured and presents seven key concepts that must be adhered to when considering establishing a measurement program:

1. Are the connections between the human-capital metrics and the ultimate success of the organization clear and compelling?

2. When the organization's strategies change, do the measures identify where human-capital strategies need to change?
 3. Does the measurement system support the development of human-capital strategies tailored to the organization's unique competitive advantage? (In contrast to copying "best practices" from other companies?)
 4. Will the measurement system drive distinctive human-capital investments to the talent groups that have the potential to create the greatest economic impact?
 5. Can the measurement system support decisions about HR programs before they are implemented? (In contrast to evaluating programs only after the fact?)
 6. Can the measurement system reveal when HR programs should be discontinued?
 7. Does the measurement framework identify how talent creates value within the organization in a way that is understandable and motivating to all employees?
- (2000, p.84)

Human resource practitioners, especially top management must become proficient in value chain analysis before true and effective human capital measurement becomes possible.

Grossman contends that fewer than half of all HR departments utilize metrics of any kind; human capital metrics are critical if human resource departments are going to be valued by their numbers oriented fellow management. A summary of Grossman's ten key human capital metrics follows:

1. Revenue Factor = Revenue / Total FTE. The basic measure understood by managers. The FTE number should include regular employees and contingent labor.
2. Voluntary Separation Rate = Voluntary separations/Headcount. Along with the time to fill jobs, this represents potential lost opportunity, lost revenue and more highly stressed employees who have to fill in for departed colleagues.
3. Human Capital Value Added = Revenue - (Operating expense - [Compensation cost + Benefit cost[*]]) / Total FTE. This is the prime measure of people's contributions to an organization. It answers the question, what are people worth?
4. Human Capital ROI = Revenue - (Operating expense - [Compensation cost + Benefit cost[*]]) / (Compensation Cost - Benefit Cost). This is a ratio of dollars spent on pay and benefits to an adjusted profit figure.
5. Total Compensation Revenue Percent = Compensation cost + Benefit cost / Revenue. If you monitor pay and benefits in comparison to revenue per employee, you can see the return on your investment.
6. Total Labor Cost Revenue Percent = Compensation cost + Benefit cost + Other labor cost / Revenue. By looking at total labor cost vs. Total Compensation Revenue Percent, you can see the complete cost of human capital. Total Labor Cost Revenue Percent shows not only pay and benefits, but also the cost of contingent labor.
7. Training Investment Factor = Total training cost / Headcount

8. $\text{Cost per Hire} = \text{Advertising} + \text{Agency fees} + \text{Employee referrals} + \text{Travel cost of applicants and staff} + \text{Relocation costs} + \text{Recruiter pay and benefits} / \text{Operating expenses}$
9. $\text{Health Care Costs per Employee} = \text{Total cost of health care benefits} / \text{Total employees}$
10. $\text{Turnover Costs} = \text{Cost to Terminate} + \text{Cost per hire} + \text{Vacancy cost} + \text{Learning curve loss}$

[*] Exclude payments for time not worked (2000, p.28).

Human resource departments are cautioned not to focus on only what can be easily quantified in dollars and cents; this will only mimic the inherent disadvantages of traditional accounting in valuing human capital.

Human resource professionals appear to be their own worst enemy; this statement stems from a pervasive view that measuring people is inherently bad. Another second factor arises in that even if they want to measure, most HR professionals simply do not have the training to do so. Lastly, of the half of all HR groups that do use metrics of any kind; they use measurement techniques designed to glorify their departments—not effectively measure human capital. In summary, the data suggest that there are manifestations of human capital that lend themselves to measurement; these measurements are inconsistently used and rarely applied as an effective human capital measurement tool during the M&A process. Nor it seems in managing the people side of the business.

Summary and Emergent Propositions

The literature review phase of the research project encompassed a review of approximately 5,300 potentially related references; of these approximately 180 were found to be topically or anecdotally related to the research questions. No original scientific research directly focused on the research questions was located in the literature knowledge base. Considerable insight about the research questions was mined from the tangential research; and emergent propositions related to the research questions did surface from the literature review process. Related research was found by searching the following knowledge bases using key terms and phrases: Human capital, human resources, mergers and acquisitions, business consolidations, labor economics, mergers, metrics, human factors, M&A decision making processes and human resource issues.

The M&A Decision Process

The merger and acquisition decision process is necessarily complex and time consuming with many attendant variables. The anecdotal research suggests several key variables that affect the decisions and may well operate in conjunction with human capital factors and their measurable manifestations. Again, a list follows, and no implied order of importance is purported to exist at this point.

1. Managerial judgment.
2. Market pressures.
3. Decision making process.
4. Decision behaviors.
5. Seller readiness.
6. Buy/Sell relationship.
7. Boards of Directors.

8. Entrepreneurial behaviors.
9. Family relationships.
10. Managerial focus.
11. Human capital issues.
12. Government regulations.
13. Business sector.
14. Price.
15. Technological systems.
16. Due diligence process.
17. Location.
18. Organizational culture.
19. Timeliness.
20. Management style.
21. Employee involvement.
22. Hostile versus non-hostile.
23. Risk aversion.
24. Killer variables.
25. Group decision-making.

The research indicates that the listed factors may influence the M&A decision making process at various times, in various ways, depending upon the type of transaction and its particulars.

Question One: Identifiable Human Capital Factors

Many potentially identifiable human capital factors were present in the related literature that could have an influence on the M&A process. A factor was listed if the literature supported it as an influencing variable in the process. At this point a consolidated list was simply generated as under consideration for further research. No degree of importance was implied.

1. Regulatory and compliance issues.
2. Selection of M&A target, fit issues.
3. Due diligence.
4. M&A process.
5. Employee “ailments.”
6. Management strategy and execution.
7. Employee retention.
8. Intellectual capital.
9. Type of acquisition.
10. Culture.
11. Nationality.
12. Gender.
13. Age.
14. Psychological readiness.
15. Ethics.
16. Profession or position.
17. Pace of change.
18. Management style.

19. CEO focus.
20. Human Resources.
21. Communications.
22. Technology.
23. Employee buy-in.
24. Trust.
25. Motivation.
26. Time/Speed.
27. Compensation, benefits, and pensions.
28. Generational issues.
29. Unions.
30. Business sector.
31. Entrepreneurship.
32. Family.

It is believed that these factors and potentially others yet to be identified are present within the M&A environment and have the potential to influence the outcome of the consolidation process.

Question Two: Measurable Human Capital Manifestations

While no standards yet exist for human capital metrics, attempts are being made by academics and business practitioners to measure what might be called human capital manifestations. Current work typically stems from the human capital management and labor economics areas and was not directly related to human capital within the M&A

environment. A consolidated list of potentially measurable human capital manifestations developed from the literature follows; no degree of importance is assumed.

1. Turnover.
2. Absenteeism.
3. Plant Safety.
4. Product Quality.
5. Employee Attitudes.
6. Staff/Employee relationships.
7. Cultural issues.
8. Employee satisfaction.
9. Key employee retention.
10. Human capital.
11. Compensation.
12. Motivation.
13. Employee investment.
14. Stock price.
15. Customer capital.
16. Intellectual capital.
17. Relationship capital.
18. Systems.
19. Training and development.
20. Human aspects.
21. Due diligence.

22. HR due diligence.
23. Benefits.
24. Company reputation.
25. Workforce competence.
26. Legal issues.
27. Union issues.
28. Labor relations.
29. Policy
30. HR focus and competence.
31. Churn—short term turnover.
32. Customer relations.
33. Human capital linkages.
34. Strategy.
35. Competitive advantage.
36. Human capital investment.
37. HR programs.
38. Value/revenue creation.

The notion exists, that out of this primordial stew of potentially measurable human capital manifestations there may reside a core of metrics that influence the M&A process. Additional research may well consolidate this list and could identify other measurable manifestations.

Emergent Research Questions

Two preliminary research questions have been posed as the focus of the study and are being restated for clarity and refreshment:

1. In a merger and acquisition environment, are there identifiable human capital factors that should be considered?
2. What are the manifestations of these human capital factors that should be measured?

While no direct empirical research exists, the literature review process suggests that identifiable human capital factors and their measurable manifestations are extant in the M&A process. Since these emergent propositions stemming from the research questions are active in the M&A environment; the researcher posits that the initial general research questions have been answered and/or answered in part. The review of the literature has resoundingly indicated that the research questions are worthy of further investigation and refinement. Accordingly, the research questions are being restated to provide greater depth and clarity regarding emergent issues:

1. How do business executives perceive the relative importance of identified human capital variables associated with M&A?
2. What is the importance of the measurable human capital metrics/manifestations as a potentially critical decision point during the M&A process?

In response to anecdotal inference of the literature about the importance and overall importance of human capital in the M&A decision process, a third emergent research question arose for investigation.

3. How do business executives perceive the relative importance of all identified factors in the M&A decision making process.

Pursuant to knowledge gained during the literature review process, a research design was constructed to test the three newly developed research questions.

CHAPTER 3: METHODOLOGY

The Problem

The fundamental purpose of this research study is to identify and isolate human capital issues and determine their relative importance in the merger and acquisition decision making process. The research questions are developed and summarized in three phases: 1) The perceived importance of human capital issues relative to the overarching M&A process, 2) The importance of identified human capital issues during the M&A process, 3) The importance of having objective human capital metrics. A primary practical goal of the research is to provide original knowledge regarding human capital issues during the M&A process.

Paradigm & Design

The study focusing on mergers and acquisitions is primarily of the quantitative research paradigm stemming from the positivist tradition; and is by practical and ethical constraint of the non-experimental—comparative type. Additionally, the two open ended questions utilized a qualitative research paradigm, more specifically a grounded theory based process (Patton, 1990). Based on the topic and intent of the research it could also be characterized as applied or action research, which seeks to solve a practical problem or provide knowledge for the benefit of a given professional group or subject area.

Procedure

Subsequent to an exhaustive literature review of the research subject, a survey instrument was developed and tested for content validity by a small group of subject

matter experts. This survey was then administered to a broader group of business executives to gather information regarding the research questions for statistical analysis. A detailed description of the research procedure and its supporting tasks follows.

Data Collection

An investigator developed survey instrument was customized to gather the necessary information to answer the research questions. The survey instrument was adapted for use on the World Wide Web (WWW). Email was used by participating educational organizations to invite their members to take the online survey. The email message contains a link to a letter from the principal investigator and co-investigator containing a brief description of the survey, its purpose, and an invitation to complete the ten to fifteen minute or less exercise. A second link to the Colorado State University School of Education web site was embedded, that when clicked loaded the survey. Subjects were only able to access the survey through this link and non-subjects were excluded from access to the URL link. Once completed the survey data link generated an anonymous email containing only generic text file responses—absolutely no personal or identifying information such as email or IP address is relayed back to the researcher.

Upon completion of the survey, participants are invited to register for a cash drawing of \$100, \$50, and \$25 for their investment of time. Submitting their completed registration creates a second, isolated from the researchers, email that is forwarded to Dr. Donald Quick/Research Associate IV, who administered the drawing of the prize and ensured fulfillment.

The only people who will had access to the secure server containing the compiled data are Dr. Donald Quick and the administrator of Academic Computing and

Networking Services at Colorado State University. The researcher has no direct access, authorized access, or visibility to the Web server. This protocol will forever shield personally identifiable information from the researcher, or any other unwanted intruders—in fact this information is never compiled or generated in a non-technical way.

Population

The theoretical or target population is all business executives, preferably those with high-level experience with mergers and acquisitions. The accessible population was limited to membership lists of several Colorado State University executive MBA and executive human resource development class lists. Of course, the actual sample was limited by the response rate of the potential subject pool.

Sampling Technique

Non-probability sampling was used due to unavailability of the sampling frame (class lists). Within this sampling technique, a convenience sample was tapped due to obvious constraints of time and resources. Every effort was made to ensure a broad swath of representative practicing executives be surveyed to gain maximum insight into the research questions currently under study.

Target Subjects

The subjects for this study are business management and human resource development executives engaged in graduate study and belonging to selected and cooperative graduate educational organizations. Business and Human Resources were chosen to gain a relatively diverse view of the merger and acquisition process—and both groups would normally be intimately involved in the process, albeit at sometimes different timeframes. Business sector and size varied as did public versus private

companies; no attempt was made to screen or influence participant's companies or subsequent respondents.

Participants

An additional, emergent research question developed as an outcome of the actual web based survey process pertaining to the early and later respondents. Are there differences between participants who were early or later responders, in that they responded before or after the first reminder email? This question is subsequently referred to as research question 0 in research results discussions.

Delimitations

As previously discussed, the intentionally limited population of the convenience sample is a fundamental delimiter reducing the scope of the research study and ultimately the generalizability of the results. Most study delimiters stem from obvious constraints of time, scope and resources attendant to the purpose of a Ph.D. dissertation.

Instrument

The "Merger and Acquisition Survey Instrument" (MASI) was developed by the researcher with the sole purpose of polling business executives regarding M&A practices.

Description

A cover letter provides a brief introduction as to the purpose of the instrument, risks, and benefit precedes the MASI; this provides information and allows potential participants an initial decision point regarding participation in the study. The letter also provides an instruction set and a time investment requirement of about ten to fifteen minutes or less to complete the survey. Potential participants may decide to proceed by clicking an embedded URL causing the survey instrument to load on their computer

screen. Participants could decline at any time until after they submitted their anonymous results.

The instrument is organized around five primary survey points: 1) The overall M&A decision process, 2) human capital factors, 3) measurable human capital manifestations, 4) general demographic information about the participant's position and company, and 5) Two open ended questions. Questions are primarily answered through the use of a seven point Likert type rating scale. Two secondary techniques are used; first, multiple choice for demographic information and, second, short answer to gather other potentially useful information.

Variables

Variables have been condensed from the more comprehensive lists generated from the literature review process. This was done to eliminate redundancy, ensure clarity, and to provide a focus and time commitment for the subject-end user at a level appropriate for a survey instrument. Each of the variables listed below is based on a rating of the importance of the individual factor.

The M&A decision process variables. This set of five variables tends to be overarching and comprehensive in nature with a major impact on the M&A decision making process, with primary "go/no-go" and implementation plan sway. In the end, interpretation of these variables should be deal specific; however, it is believed that each variable has central tendencies revolving around each of the main variable titles.

1. Management Strategy & Execution.

This variable describes management's strategic motivation, overall tactical plan for the merger or acquisition, and how well the line and staff operations are executed.

2. Governmental Regulations.

Local, state and federal regulatory and legal requirements that affect the contemplated M&A.

3. Human Capital Issues.

An overall descriptor of the myriad issues surrounding the people side of any particular transaction, and could include HR management, compensation, benefits, training, risk management, security, people specific legal issues, and language and cultural issues, as well as other personnel factors specific to a given deal.

4. Technology.

This variable includes: merger acquired technology, information systems, manufacturing process issues, communications incompatibility, and technology based intellectual capital.

5. Business & Transaction Factors.

Structure of the deal can be critical; business fit and compatibility, pricing, type of transaction, and ownership issues all play a role in M&A decision making.

Identifiable human capital factors variables. This group of variables focuses on the observable factors attributable to the people involved in one or more of the contemplated M&A organizations. At this point the six identified human capital factors

are still fairly broad and may or may not lend themselves to being measured—or we may not wish to measure that particular attribute.

1. Culture.

The customs and embedded social mores of any given organization.

2. Regulatory Compliance.

Local, state, and federal laws and regulations governing the people involved in any given M&A transaction.

3. Employee Policies.

Rules and guidelines which govern the administration of a given organization's members.

4. OB/OD Issues.

Organization development or change management issues currently underway in the target or acquiring organization, or now underway due to the proposed M&A; organizational behavior issues are those which occur on a more micro-level and may be attributed to the individual or small organizational constituent groups. Both of these variables are often tangible results of leadership preference and management style within the corporation.

5. Compensation & Benefits.

This consolidated variable is description of the total compensation plan within each affected organization. M&A often involves

changes in member's paychecks and benefits structure; any changes are often a "lightning rod" issue for employees.

6. Employee Attributes.

Employee demographics can have a significant effect on the success or failure of a proposed merger. In addition to typical personnel demographics, this variable could include job titles, management structure, geographic location, liberal versus conservative, sunny versus rainy climate, self-directed teams, and union versus non-union environments.

Measurable human capital manifestations variables. This set of variables includes a subset of people manifestations that can and typically should be measured before approving any contemplated merger or acquisition. As a group they are people specific and tend to be the most focused and quantifiable of any variables discussed so far.

1. Turnover.

This variable quantifies turnover for any reason, of any employee category or duration of service including commonly tracked "churn" and annualized monthly terminations.

2. Human Capital Value.

Within any given business there are ways to quantify productivity, revenue, or ultimately value for any given employee, group, or organization. Metric can be difficult to obtain objectively and is very dependent upon type of business and whether public or not.

3. Cost Per Employee.

This metric derives to set an individual, or average cost per employee to the business and could be thought of as a relative inverse to human capital value; may be payroll or include employee benefits and other burden costs.

4. Employee Readiness Index

This metric's purpose is to ascertain how willing and prepared a given organization is to merge. Organizations at different levels of sophistication can have insurmountable integration issues.

5. Cultural Fit.

The results of some well thought out cultural assessment tool or consultative intervention, preferably prior to making the M&A decision or beginning integration activities. Assessments of this type come in countless varieties—the key is to objectively review the cultures of all affected organizations because the success or failure of the organization may well depend on it.

6. Employee Availability.

This metric quantifies the positive side of absenteeism, sick days, disability plans, various leaves, and vacation within a given organization. This metric can be an indicator of employee time-on-task, tardiness, seasonal attendance variables, and will likely be an influence on any productivity numbers to be compared between organizations.

7. Employee Contracts/Unionization

The number and type of employee contracts can have a significant impact to the perceived attractiveness of a given deal. Also, few contemplated mergers are undertaken without a serious review of union activity or if unionized—a thorough review of ratified contract and renewal date.

8. Company Employee Policies Compatibility

This variable provides a relative index of how compatible the informal and formal (written) policies of each organization are. Examples could be flex-time, absenteeism tolerance, employee participation, termination policies—to name just a few.

Demographics variables. This variable set provides insight into the characteristics of the participant's organization. This information can be potentially useful in gleaning contextual information from responses.

1. Business or HRD?

What is the participant's primary area of responsibility?

2. Company Size?

What is the approximate size of the participant's organization?

3. Business structure and industry Segment?

Which of several identified industry categories is the organization engaged?

4. Merger Experience?

What is the approximate level of M&A experience of the participant?

5. Perceived level of M&A success?

If the participant has experience with M&A, what is their perceived overall level of success?

Open ended questions. These questions are intended to gather valuable information not already contained in the other survey questions.

1. Based on your personal experience, are there other factors *not* included in the survey that you feel are important; or included factors that need additional explanation; if so please list and explain.
2. If you were personally leading a merger or acquisition what are the points you would consider most crucial to a successful outcome?

Reliability and Validity

Measurement reliability was proactively assumed through a trial run of the instrument to ensure that the instrument consistently gathered information in the intended manner and for proper functioning of the Web site.

Content validity is to be established through peer review utilizing approximately six subject matter experts. Particular focus was given to research/survey expertise and business knowledge appropriate to the survey instrument under review. Changes to the original survey draft were made as necessary based on the feedback generated by the expert panel review.

Based on the type of sampling used and the relatively small survey population it was not possible to infer a high level of external generalization. While the researcher

does believe that the subjects surveyed were representative of the larger group under study; there is no practical way to verify this assumption. It is further believed that the chosen variables are representative of the subject under study and provided worthwhile knowledge to human capital issues during mergers and acquisitions.

Data Analysis

The study under discussion lends itself to data analysis techniques within the quantitative, non-experimental, comparative approach. Additionally, the analysis was made planning that there are no marked violations of statistical assumptions and that the dependent variables are normally distributed; thus parametric statistical tools were utilized.

Research Question 1

How does general business management perceive the relative importance of the five broadly identified variables associated with the M&A decision process?

The dependent variables associated with this question were analyzed using descriptive statistics and repeated measures analysis of variance (ANOVA). This technique is utilized to compare differences between two or more means at a predetermined probability level. If the between group variance is enough larger than error variance, a significant *F* ratio statistic was generated. This would indicate that the ANOVA of the responses to the survey variables is beyond chance or sampling error. For this study a statistical significance level of .05 was chosen, this equates to a 5 out of 100 chance that the statistical inferences could be incorrect. Additionally, a Greenhouse-Geisser correction to the ANOVA was conducted to assess whether there were differences between the average ratings of the five identifiable factors.

Research Question 2

What is the importance of the six human capital variables that could be practically measured for the purpose of supporting an M&A decision?

This question was analyzed using descriptive statistics and repeated measures analysis of variance (ANOVA), with a Greenhouse-Geisser correction as in question 1.

Research Question 3

What is the importance of the eight measurable human capital metrics/manifestations as a potentially critical decision point during the M&A process?

This question was again analyzed using descriptive statistics and repeated measures analysis of variance (ANOVA), with a Greenhouse-Geisser correction similar to questions 1 and 2.

Research Question 4

Is there a difference between human resource management and other business management based on the importance of the five M&A decision making factors, the six human capital factors, and eight human capital manifestations?

This question was analyzed using 19 independent samples t tests.

Research Question 5

Are there differences between participants whose mergers or acquisitions were unsuccessful or successful?

This question was analyzed using 19 independent samples t tests.

Open ended questions

1. Based on your personal experience, are there other factors *not* included in the survey that you feel are important; or included factors that need additional explanation; if so please list and explain.
2. If you were personally leading a merger or acquisition what are the points you would consider most crucial to a successful outcome?

These questions were analyzed using a constant comparative qualitative data analysis technique using open and axial coding (Creswell, 2002). This process was used to synthesize meaning from the large quantity of text data gathered from the open responses.

CHAPTER 4: RESEARCH RESULTS

This section will discuss the logistics and results of the online survey; including descriptive and inferential statistical data analysis. Each research question will be restated, discussed, and answered relative to the data and any emergent questions will be posed and answered. Data analysis was conducted through consultations with the Colorado State University Statistical Laboratory and with reports generated using the Statistics Package for the Social Sciences (SPSS).

The Survey

The Merger and Acquisition Survey Instrument (MASI) was conducted over a nine day period as a secure, anonymous web based survey of 155 Master of Business Administration (MBA) graduate students and 157 Human Resource Development (HRD) masters students. Many, but not all, were working professionals in a variety of business and human resource fields at a diverse group of organizations. A prize pool of \$175 was used as an incentive to potentially increase the response rate; three prizes were fulfilled: 1st prize \$100 for responding within three days, 2nd prize \$50 for responding within six days, and 3rd prize \$25 for responding within nine days. Out of the accessible population of 312 people that were targeted, a total of 92 responded; 53 responded within the initial invitational email and a total of 39 after the first of two reminder emails. The total response rate generated was 29.5% (92/312). Overall, the survey was comprised of the 19 variables and two open ended questions.

One way to estimate whether the persons who replied to the survey are similar to those who received the survey but didn't reply is to compare early and later respondents on the 19 dependent variables. The assumption is that the later respondents are similar to

the non-responders. Thus, if there are no differences between early and later responders, one can assume that there would not be large differences between those who responded and those who didn't respond at all. That is, the sample would be representative of the population that received the survey.

Table 4 shows the means, standard deviations, and *t* tests comparing the early and later responders. Note that only 1 out of 19 *t* tests are statistically significant; specifically, compensation and benefits was significantly different between the early and later responders at a level of ($p=.03$). Thus, it may be generally concluded that the 92 early and later respondents are representative of the 312 members of the target population that received the survey.

Descriptive Statistics

Demographics

Participants were asked to provide information about their background with regard to five general attributes: Primary job responsibility, whether or not they had been personally involved in an M&A prior to taking the survey, perception of success of such an M&A, the organizational structure of their worksite, annual sales revenue at their site, and industry segment.

Table 4**Summary of Early and Later Respondents to the MASI Survey (n=92)**

MASI Variable Category	Respond	n	M	SD	t	p
Decision processes						
Management Effectiveness	Early	53	6.32	.85	-1.35	.18
	Later	39	6.44	.55		
Governmental Regulations	Early	53	5.40	1.12	-.61	.55
	Later	39	5.54	1.10		
Human Capital Issues	Early	53	6.11	.91	.06	.95
	Later	39	6.10	.82		
Technology	Early	53	5.64	.79	.80	.43
	Later	39	5.49	1.07		
Business Factors	Early	53	5.74	.76	1.48	.14
	Later	39	5.51	.64		
Identifiable factors						
Culture	Early	53	5.94	.77	1.53	.13
	Later	39	5.64	1.04		
Regulatory Compliance	Early	53	5.60	1.04	.80	.43
	Later	39	5.44	.94		
Employee Policies	Early	53	5.13	1.14	.45	.66
	Later	39	5.03	1.11		
OB/OD Issues	Early	53	5.47	1.22	1.05	.30
	Later	39	5.21	1.17		
Compensation and Benefits	Early	53	5.60	1.01	2.27	.03
	Later	39	5.13	.98		
Employee Demographics	Early	53	5.23	1.15	-.12	.91
	Later	39	5.26	1.23		
Measurable manifestations						
Turnover	Early	53	5.09	1.08	.43	.67
	Later	39	5.00	.97		
Human Capital Valuation	Early	53	5.55	.89	.19	.85
	Later	39	5.51	.82		
Readiness To Merge	Early	53	5.36	1.39	-.09	.93
	Later	39	5.38	1.41		
Cost Per Employee	Early	53	5.34	.92	1.20	.24
	Later	39	5.10	.97		
Cultural Fit	Early	53	5.40	1.25	-.57	.57
	Later	39	5.54	1.12		
Employee Availability	Early	53	5.00	1.07	.56	.57
	Later	39	4.87	1.08		
Contracts/Unionization	Early	53	5.25	1.24	-1.36	.18
	Later	39	5.59	1.14		
Company Employee Policies	Early	53	5.28	1.01	.24	.81
	Later	39	5.23	1.04		

Participants from most major job categories in business were represented, with Human Resources being the largest single constituency (29%); general management was the next most common category with (23%). See Table 5 for additional job demographics information.

Table 5
Primary Job Responsibility Area (n=92)

Job Category	Frequency	Percent
Human Resources	27	29.3
Management (General)	21	22.8
Marketing/Sales	15	16.3
Information Systems	11	12.0
Other	6	6.5
Finance	5	5.4
Manufacturing	4	4.3
Accounting	3	3.3

Table 6 shows that the number of participants who had previously been involved in some type of M&A activity was just under two thirds; out of the 92 respondents 56 (61%) indicated at least some direct professional involvement during the merger and acquisition process. Not surprising in today's business climate most participants had been involved in a merger or acquisition prior to answering the survey.

Table 6
Involved In M&A (n=92)

Involved	Frequency	Percent
Yes	56	60.9
No	36	39.1

Aggregate participant responses regarding the relative success of the M&A they were involved in are shown in Table 7. Of the 56 participants what had experience with mergers and acquisitions the highest response was the “Somewhat Successful” category with 20 responses or 36%. The lowest response rate fell in the “Very Successful” category with only 2 responses or 4%.

Table 7
Perception of Success of M&A (n=56)

Success	Frequency	Percent
Very Successful	2	3.6
Highly Successful	12	21.4
Somewhat Successful	20	35.7
Neither Unsuccessful Or Successful	5	9.3
Somewhat Unsuccessful	4	7.1
Low Success	10	17.9
Very Unsuccessful	3	5.4

The most respondents worked in public corporations (48%) with private corporations closely trailing at 28%. The lowest response rate came from entrepreneurial organizations at 4%. With the makeup of area business organizations most likely to have employees involved in graduate learning programs, this result seems fairly representative. See Table 8 for additional information.

Table 8
Organization Structure (n=92)

Organization	Frequency	Percent
Public Corporation	44	47.8
Private Corporation	26	28.3
Not For Profit	18	19.6
Entrepreneurship	4	4.3

Size of the representative organizations tended to vary across the board with the most being in the less than one million category (23%). All others were close at approximately 20%. See Table 9 for additional information.

Table 9
Annual Sales Revenue of Site (n=92)

Revenue	Frequency	Percent
<1 Million \$	21	22.8
100 Million \$ < 1 Billion \$	19	20.7
10 Million \$ < 100 Million \$	18	19.6
1 Million \$ < 10 Million \$	17	18.5
> 1 Billion \$	17	18.5

The industry segment of respondents varied widely, with the other category being the biggest (39%); 32 specific industry segments from advertising to utilities were listed. The next largest segments were the services group at 25% and manufacturing at 13%. See Table 10 for additional information.

Table 10
Industry Segment (n=92)

Industry	Frequency	Percent
Other	36	39.1
Services	23	25.0
Manufacturing	12	13.0
Financial	9	9.8
Education	7	7.6
Health Care	5	5.4

Overall, it appears that a broad sampling of business demographics was represented in the survey respondent population with interesting and insightful demographic information regarding human centric issues involved with the M&A process gathered during the MASI survey process.

Research Question 1a: Importance of the Five M&A Decision Processes

Research question 1a relates to the importance ratings of 5 of the 19 variables (management effectiveness, government regulations, human capital, technology, and business factors), which we called M&A decision process variables. Participants rated management effectiveness important with a mean of 6.32, which is between high importance and very high importance, and human capital issues was rated as high importance with a mean of 6.11. Business and transaction factors, technology, and governmental regulations were all rated about half way between somewhat important and high importance. Table 11 shows a summary of descriptive statistics for these five variables.

Table 11
Ratings of the Importance of Five M&A Decision Processes (n=92)

Decision Processes	<i>M</i>	<i>SD</i>
Management Effectiveness	6.32	.74
Human Capital Issues	6.11	.87
Business and Transaction Factors	5.64	.72
Technology	5.58	.92
Governmental Regulations	5.46	1.10

Research Question 1b: Comparison of the Five M&A Decision Processes

How do business executives perceive the relative importance of the five broadly identified variables associated with the M&A decision process? This question was analyzed using a repeated measures analysis of variance (ANOVA) technique comparing each of the five levels of the variable M&A decision process: Management effectiveness, governmental regulations, human capital, technology, and business and transaction factors.

A Greenhouse-Geisser correction to the ANOVA was conducted to assess whether there were differences between the average ratings of the five identifiable factors. Results indicated that participants did rate the five factors differently, $F(3.6, 324.9) = 21.56, p < .001$. This indicates that there are some differences among the 6 variables; refer to M, SD in Table 11 where the means are listed in descending order.

The five means were compared using least significant difference (LSD) post hoc pairwise comparisons. Management effectiveness was rated as significantly more important than governmental regulations, technology, and business and transaction factors but not human capital. Also, human capital was rated more important than governmental regulations, technology and business and transaction factors.

Research Question 2a: Importance of the Six Identifiable Human Capital Factors

Research question 2a relates to the importance of 6 of the 19 variables (culture, regulatory compliance, employee policies, OB/OD issues, compensation and benefits, and employee demographics). Note that these variables were referred to as identifiable human capital factors. Cultural issues were rated as having close to high importance ($M=5.82$); employee policies were rated at the low end of somewhat important with a mean of (5.09). Regulatory compliance, compensation and benefits, OB/OD issues, and

employee demographic attributes were all rated on the low to mid-range of somewhat important. It is important to note that even the lowest scores were rated on average as somewhat important. Refer to Table 12 for additional descriptive statistics regarding these six variables.

Table 12
Identifiable Human Capital Factors (n=92)

Identifiable Factors	<i>M</i>	<i>SD</i>
Culture	5.82	.90
Regulatory Compliance	5.53	1.00
Compensation and Benefits	5.40	1.02
OB/OD Issues	5.36	1.20
Employee Demographic Attributes	5.24	1.18
Employee Policies	5.09	1.03

Research Question 2b: Comparison of the Six Identifiable Human Capital Factors

Are there significant differences in the importance of the six human capital variables that could be practically measured for the purpose of supporting an M&A decision? This question was analyzed using a repeated measures analysis of variance (ANOVA) technique to compare the importance of the six relevant dependent variables: Culture, regulatory compliance, employee policies, OB/OD issues, compensation and benefits, and employee demographics.

A Greenhouse-Geisser correction to the ANOVA was conducted to assess whether there were differences between the average ratings of the six identifiable factors. Results indicated that participants did rate the six factors differently, $F(4.4, 402.0) =$

7.07, $p < .001$. This indicates that there are some differences among the 6 variables; refer to M , SD in Table 12 where the means are listed in descending order by factor mean value.

The six means were compared using least significant difference (LSD) post hoc pairwise comparisons. Culture was related as significantly more important than each of the other five identifiable human capital factors. Regulatory compliance was rated more important than employee policy, but not significantly more important than OB/OD, compensation and benefits and employee demographics. In addition employee policy was significantly less important than OB/OD and compensation and benefits.

Research Question 3a: Importance of the Eight Measurable Human Capital

Manifestations

Research question 3a relates to the importance of 8 of the 19 variables (turnover, human capital value, employee readiness, cost per employee, cultural fit, employee availability, employee contracts, and employee policies). On average, respondents rated human capital valuation about half way between somewhat important and highly important (5.53), with cultural fit also rated similarly (5.46). The lowest rated variable of this group was employee availability at ($M=4.95$) with a rating of slightly below somewhat important. Employee contracts/unionization, employee readiness to merge, company employee policies, cost per employee, and turnover were all rated at the lower end of somewhat important (ranging from 5.39 to 5.05). Table 13 shows a descriptive statistics summary of these eight variables.

Table 13
Measurable Human Capital Manifestations (n=92)

Measurable Manifestations	<i>M</i>	<i>SD</i>
Human Capital Valuation	5.53	.86
Cultural Fit	5.46	1.19
Employee Contracts/Unionization	5.39	1.20
Employee Readiness To Merge	5.37	1.39
Company Employee Policies	5.26	1.02
Cost Per Employee	5.24	.94
Turnover	5.05	1.03
Employee Availability	4.95	1.07

Research Question 3b: Comparison of the Eight Measurable Human Capital Manifestations

What is the relative importance of the eight measurable human capital metrics/manifestations as potentially critical decision points during the M&A process? This question was analyzed using a repeated measures analysis of variance (ANOVA) technique to compare the eight relevant dependent variables: turnover, human capital value, employee readiness, cost per employee, cultural fit, employee availability, employee contracts, and employee policies.

A Greenhouse-Geisser correction to the ANOVA was conducted to assess whether there were differences between the average ratings of the eight measurable manifestations. Results indicated that participants did rate the eight factors differently, *F*

(5.7, 522.1) = 3.97, $p=.001$. This indicates that there are some differences among the eight variables; refer to M , SD in Table 13 where the means are listed in order.

The eight means were compared using least significant difference (LSD) post hoc pairwise comparisons. Human capital valuation was rated significantly more important than turnover, cost per employee, employee availability, and company employee policies, but not employee readiness, cultural fit, and employee contracts. Cultural fit was rated more important than turnover and employee availability. Employee contracts was rated more important than turnover and employee availability. Employee readiness was only rated more important than employee availability. Employee policies was also rated more important than employee availability. Finally, cost per employee was also rated more important than employee availability.

Research Question 4: Differences Between Human Resources and Other Business Management Participants

Is there a difference between human resource management and other business management participants on the importance of the five M&A decision making factors (management effectiveness, government regulations, human capital, technology, and business factors), the six identifiable human capital factors (culture, regulatory compliance, employee policies, OB/OD issues, compensation and benefits, and employee demographics), and eight measurable human capital manifestations (turnover, human capital value, employee readiness, cost per employee, cultural fit, employee availability, employee contracts, and employee policies)? This question was analyzed using 19 independent samples t tests as shown in Table 14.

Table 14***Summary of Differences Between Human Resources and Other Business Management***

MASI Variable Category	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Decision process						
Management Effectiveness	HR	25	6.36	.64	.35	.73
	Other	67	6.30	.78		
Governmental Regulations	HR	25	5.68	1.03	1.19	.24
	Other	67	5.37	1.13		
Human Capital Issues	HR	25	6.16	.94	.34	.73
	Other	67	6.09	.85		
Technology	HR	25	5.40	1.12	-1.13	.26
	Other	67	5.64	.83		
Business Factors	HR	25	5.60	.65	-.34	.74
	Other	67	5.66	.75		
Identifiable factors						
Culture	HR	25	5.60	.71	-1.41	.17
	Other	67	5.90	.96		
Regulatory Compliance	HR	25	6.00	.82	2.85	.01
	Other	67	5.36	1.01		
Employee Policies	HR	25	5.12	1.20	.17	.87
	Other	67	5.07	1.11		
OB/OD Issues	HR	25	5.32	1.03	-.19	.85
	Other	67	5.37	1.27		
Compensation and Benefits	HR	25	5.60	1.04	1.14	.26
	Other	67	5.33	1.01		
Employee Demographics	HR	25	5.64	1.04	2.02	<.05
	Other	67	5.09	1.20		
Measurable manifestations						
Turnover	HR	25	5.12	.97	.37	.71
	Other	67	5.03	1.06		
Human Capital Valuation	HR	25	5.24	.78	-2.03	<.05
	Other	67	5.64	.87		
Readiness To Merge	HR	25	5.44	1.50	.30	.77
	Other	67	5.34	1.36		
Cost Per Employee	HR	25	5.28	1.10	.25	.80
	Other	67	5.22	.89		
Cultural Fit	HR	25	5.24	1.17	-1.07	.29
	Other	67	5.54	1.20		
Employee Availability	HR	25	4.84	1.11	-.58	.57
	Other	67	4.99	1.07		
Contracts/Unionization	HR	25	5.88	.88	2.87	.01
	Other	67	5.21	1.26		
Company Employee Policies	HR	25	5.36	1.04	.57	.57
	Other	67	5.22	1.01		

Note. Total $n=92$, $df=90$ for all tests except employee contracts/unionization where df was 61.6 because the t test for unequal variances needed to be used.

While the mean responses to the variables differed somewhat, analyses of the 5 *t* tests of the decision making factors suggests that there are no statistically significant differences at ($p < .05$) between the views of the human resources and business other groups.

Of the six identifiable human capital factors variables two groups returned statistically significant differences in their responses. The human resources participants were significantly different from business other on regulatory compliance ($p = .01$). The human resources group rated regulatory compliance as more important ($M = 6.00$) than the business other group rated the same variable (5.36). The difference between the means is .64 on a 7 point scale. The *d* effect size is approximately .67 or medium to large. Employee demographic attributes was also significantly different at a level of ($p < .05$); both groups rated this variable as at least somewhat important with human resources at (5.64) and business other at (5.09). This equals a difference between means of .55 on the same 7 point scale; thus, we show an effect size of approximately .48 or medium. None of the other differences in mean responses between the two groups were of statistical significance.

The measurable human capital manifestation group of variables showed two significant differences in response means. Human capital valuation was rated important by both groups, however, human resources had a significantly lower mean of 5.24 and business other had a higher mean of 5.64 ($p < .05$). On a scale of 1-7 with a potential difference of 6, the means differed by .40, from which was calculated an effect size of approximately .47 or medium. The second significantly different variable was employee contracts and unionization; human resources returned a mean of 5.88 and business other

had a significantly lower rating of 5.21 ($p=.01$). A mean difference of .67 was scored for this variable on the same 7 choice scale. The effect size for this group is approximately .61 which was medium to large. No other statistically significant differences between the means for the two groups occurred.

Research Question 5: Differences Between Successful or Unsuccessful M&As

Are there differences between participants whose mergers or acquisitions were unsuccessful or successful based on the importance of the five M&A decision making factors (management effectiveness, government regulations, human capital, technology, and business factors), the six identifiable human capital factors (culture, regulatory compliance, employee policies, OB/OD issues, compensation and benefits, and employee demographics), and eight measurable human capital manifestations (turnover, human capital value, employee readiness, cost per employee, cultural fit, employee availability, employee contracts, and employee policies)? This question was analyzed using 19 independent samples t tests as shown in Table 15.

There were no significant differences between the mean responses of the successful M&A experience and unsuccessful M&A experience groups for the decision process factors variable group, as shown in the five t tests calculated for these two groups. Similarly, no significant differences were found for the six identifiable human capital factors for the two success groups. Also, the eight t tests run for the measurable human capital manifestations group showed only non-significant differences in the mean responses for the M&A success groups. In summary, no significant differences were found between the two groups and their 19 surveyed variables.

Table 15**Summary of Differences Between Participants With Successful or Unsuccessful M&As**

MASI Variable Category	Success	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Decision process						
Management Effectiveness	No	17	6.24	.75	-1.73	.09
	Yes	34	6.56	.56		
Governmental Regulations	No	17	5.35	1.22	-1.12	.27
	Yes	34	5.71	.97		
Human Capital Issues	No	17	6.29	.69	.30	.77
	Yes	34	6.24	.65		
Technology	No	17	5.47	1.28	-.61	.55
	Yes	34	5.68	.77		
Business Factors	No	17	5.65	.86	-.75	.46
	Yes	34	5.82	.63		
Identifiable factors						
Culture	No	17	6.12	.78	.36	.72
	Yes	34	6.03	.83		
Regulatory Compliance	No	17	5.59	1.06	.09	.93
	Yes	34	5.56	1.05		
Employee Policies	No	17	5.59	1.06	1.71	.09
	Yes	34	5.03	1.11		
OB/OD Issues	No	17	5.82	1.02	1.26	.21
	Yes	34	5.44	1.02		
Compensation and Benefits	No	17	5.53	1.07	.66	.51
	Yes	34	5.32	1.04		
Employee Demographics	No	17	5.47	1.18	.36	.72
	Yes	34	5.35	1.04		
Measurable manifestations						
Turnover	No	17	5.29	1.11	.57	.57
	Yes	34	5.12	1.01		
Human Capital Valuation	No	17	5.71	.59	.12	.91
	Yes	34	5.68	.95		
Readiness To Merge	No	17	5.71	1.31	1.44	.16
	Yes	34	5.12	1.41		
Cost Per Employee	No	17	5.29	1.05	.56	.58
	Yes	34	5.15	.78		
Cultural Fit	No	17	5.71	1.26	.28	.78
	Yes	34	5.62	.95		
Employee Availability	No	17	5.18	.88	1.75	.09
	Yes	34	4.62	1.16		
Contracts/Unionization	No	17	5.65	1.27	.81	.42
	Yes	34	5.32	1.39		
Company Employee Policies	No	17	5.35	1.17	.28	.78
	Yes	34	5.26	1.02		

Note. Total $n=51$, $df=49$ for all tests except technology where df was 21.9 and business and transaction factors where df was 24.7 because the t tests for unequal variances needed to be used.

Summary of Open Ended Question 1

Based on your personal experience, are there other factors *not* included in the survey that you feel are important; or included factors that need additional explanation; if so please list and explain.

A qualitative grounded theory, constant comparative, open and axial coding process was used to produce Table 16, which summarizes the responses to open ended question 1. Of the 92 participants surveyed, 35 chose to provide additional information by answering open ended question 1. By far the most often cited factor, with 16 responses, was clear and open communications with employee constituent groups. Change management expertise was listed as an M&A issue four times, as was cultural issues. Employee issue was listed three times; these respondents felt that not enough focus was given to constituent employee groups. Management expertise, performance metrics, and relations between groups all received two responses. The other factors row included eight, single responses of: benefits, contracts, customer, demographics, global aspects, merger versus acquisition, partnerships, and power and ego issues. In summary, respondents cited communications four to one as the most important M&A factor not listed on the survey when answering open ended question 1.

Table 16
Summary of Other Important Factors (n=35)

Important Factors	Responses
Communications	16
Change Management	4
Culture	4
Employees	3
Management Expertise	2
Performance Metrics	2
Relations	2
Other Factors	8

Note. Six participants provided more than one factor.

Summary of Open Ended Question 2

If you were personally leading a merger or acquisition what are the points you would consider most crucial to a successful outcome?

As in open ended question 1 a constant comparative, open and axial coding process was used to analyze the text responses to question 2. 56 out of 92 surveyed participants provided additional information by answering open ended question 2.

Similar to open ended question 1, a qualitative coding process was used to synthesize the summary presented in Table 17. Culture was the most often cited point crucial to a successful outcome of a merger or acquisition; communications followed a close second with 16 responses. Respondents listed business fit as crucial nine times, and integration issues received eight. Finance and management expertise tied with four responses each. Change management, due diligence, employee buy-in, and stakeholders all received three

responses each. Respondents cited regulatory issues, strategy, and technology as crucial two times. Eight other points were each mentioned by a single participant: benefits, demographics, employee assistance, human capital, information, geography, metrics, and productivity. On the basis of the information gleaned from open ended question 2, it seems clear that survey respondents feel that culture and communications are two points crucial to the success of an M&A.

Table 17
Points Most Crucial to a Successful Outcome (n=56)

Crucial Points	Responses
Culture	19
Communications	16
Business Fit	9
Integration Issues	8
Finance	4
Management Expertise	4
Change Management	3
Due Diligence	3
Employee Buy-In	3
Stakeholders	3
Regulatory	2
Strategy	2
Technology	2
Other Points	8

Note. 23 participants provided more than one point.

Summary of Chapter 4

Of the five decision process variables shown in Table 18, management effectiveness was rated high to very high in importance, with human capital issues at high importance; business and transaction factors, technology and governmental regulations were all rated lower in the somewhat to high range of importance. For identifiable human capital factors, culture was rated high in importance and employee policies was rated somewhat important; the other four variables in the identifiable human capital factors group were rated somewhat to high in importance. Within the measurable manifestations group, six variables (human capital valuation, cultural fit, employee contracts, employee readiness to merge, company employee policies and cost per employee) were all rated somewhat to high importance and the two remaining variables (turnover and employee availability) were rated lower at somewhat important.

A comparison of means within the decision process group shows management effectiveness and human capital factors ranked first with the other three factors ranked last. Within the identifiable factors group culture was ranked first and employee policies last. Human capital valuation ranked highest within the measurable manifestation group, with turnover and employee availability ranked lowest. While these are all approximate comparisons, they may be useful to provide clarity in gauging relative participant responses for each variable within a given group.

Table 18**Summary of Chapter 4: Research Results**

MASI Variable Category	Mean	Importance	Comparison of Means	HR versus Other	Success Yes No
Decision process					
Management Effectiveness	6.32	H → VH ^a	1 st ^b	NS ^c	NS
Human Capital Issues	6.11	H	1 st	NS	NS
Business Factors	5.64	S→H	Last	NS	NS
Technology	5.58	S→H	Last	NS	NS
Governmental Regulations	5.46	S→H	Last	NS	NS
Identifiable factors					
Culture	5.82	H	1 st	NS	NS
Regulatory Compliance	5.53	S→H	2 nd	**	NS
Compensation and Benefits	5.40	S→H	3 rd	NS	NS
OB/OD Issues	5.36	S→H	3 rd	NS	NS
Employee Demographics	5.24	S→H	3 rd	*	NS
Employee Policies	5.09	S	Last	NS	NS
Measurable manifestations					
Human Capital Valuation	5.53	S→H	1 st	*	NS
Cultural Fit	5.46	S→H	2 nd	NS	NS
Employee Contracts	5.39	S→H	2 nd	**	NS
Employee Ready To Merge	5.37	S→H	2 nd	NS	NS
Company EE Policies	5.26	S→H	3 rd	NS	NS
Cost Per Employee	5.24	S→H	3 rd	NS	NS
Turnover	5.05	S	Last	NS	NS
Employee Availability	4.95	S	Last	NS	NS

^a VH = very high importance, H = high importance, S = somewhat important, (e.g.: for management effectiveness, H→VH, indicates that importance was between high and very high).

^b 1st = first in importance, 2nd = second in importance, 3rd = third in importance, last = last in importance, (e.g.: management effectiveness, 1st indicates that the mean was rated or tied for first in importance).

^c NS = Not significant, * p<.05, **p<.01.

In comparing human resources versus other business management only four of the 19 variables surveyed were found to have significant interaction. None of the five variables in the M&A decision process group were significant. Regulatory compliance

was significant with a probability at $<.05$ and employee demographics was significant at probability $<.01$ within the identifiable factors group (two out of six). The measurable manifestations group had two out of eight significant variables: Human capital valuation at ($p<.05$) and employee contract at ($p<.01$). Of the 92 participants surveyed, 51 indicated they had been involved with mergers and acquisitions; within the involved group, 34 had experienced success at some level and the remaining 17 judged their experiences unsuccessful. Of the 19 independent samples *t* tests performed for the two M&A (success yes/no) groups none were found to be significant at ($p<.05$) level.

CHAPTER 5: DISCUSSION OF FINDINGS AND RECOMMENDATIONS

MASI Findings

There appear to be no significant differences between early and later responders to the merger and acquisition survey instrument (MASI); thus we can conclude that the respondents are generally representative of the 312 recipients of the survey. Responses from the 92 participants suggest that all five of the “M&A decision process” variables surveyed by the (MASI) in research question one were rated as important issues to consider during the M&A decision making process. Of the five decision process variables management effectiveness was rated significantly higher than the other four. Similarly, the six “identifiable human capital factors” surveyed in research question two were rated as important during the M&A process; out of this group culture was rated significantly higher than the other five factors. Culture was also supported by responses to the open ended questions as very important to the M&A process (see Table 17). Additionally in research question three, seven of the eight “measurable human capital manifestations” were rated by participants as at least somewhat important, with the exception of employee availability. Human capital valuation was rated significantly higher than the other seven variables in the metrics group. Overall, it appears that participant responses validated face value of the MASI instrument and its 19 variables as important issues to consider during the M&A process. Of the three main groups of variables, the data suggests that management effectiveness, culture, and human capital valuation are the most critical decision points to focus on during the merger and acquisition process.

Human resources respondents differed in their views versus the “business other” category in research question four; but only in two of the three variable groups. Participants did not return a significant difference in their views regarding the M&A decision process. However, both the “identifiable factors” group and “measurable manifestations” group did show significant differences in two categories each. The two variables within the identifiable factors group that showed significant differences were regulatory compliance and employee demographics. Likewise, human capital valuation and employee contracts/unionization were significant in the measurable manifestations group. This seems to indicate that within the surveyed population, 15 of the 19 variables did not show significant differences in the viewpoints between the two groups. The research outcome was somewhat surprising in that there were not additional significant interactions between the responses of the human resources and business other groups—in practice these two groups can be more polarized in their philosophies regarding M&As. The data derived from the study indicates that HR and other business management are more alike than previously supposed (see Table 14). This result is not fully consistent with previous research. For example, Mayo’s research in 2001 showed that business managers typically saw people as costs to be managed, while Carnevale’s earlier study of 1983 purported that people must be viewed as the only truly distinguishable business asset. Data gathered from the MASI is presented in Table 14 and shows significant differences in only four variables. These results may stem from the relatively sheltered positions of the surveyed populations; a more directly M&A involved group may have shown additional variation.

Of the 51 respondents with direct M&A experiences surveyed in research question five, no significant differences were found in any of the 3 categories or 19 variables. This was another revelation of the research, as significant differences were expected. Thus, the position is advanced that since the involvement level of most of the participants was limited to only the periphery of the M&A process, so in effect they were somewhat limited in their knowledge of successful and unsuccessful mergers and acquisitions. If this is the case, it could account for the unexpectedly homogeneous viewpoints between the two groups.

Information gleaned from open ended questions one and two (see Tables 16 and 17) strongly suggests that clear and open communications from management regarding the M&A process and its likely effects on employee constituent groups was foremost on participant's minds. The second most noted response had to do with culture and the cultural aspects of the M&A integration process. While other issues were noted, none garnered the number of responses nor the consistent volume of text recorded as the other comments. These responses suggest that M&A practitioners should focus on establishing a clear and ongoing communications plan during the entire merger process. Cultural aspects of the M&A process should be considered before the target is finalized—if possible, and throughout the integration process

Overall, the research returned important knowledge that over time may prove valuable to improving the M&A process. Specifically, we now know that of the 19 surveyed variables 3, (management effectiveness, culture, and human capital valuation) appear to be the most important to consider during the process. Human resources and general business management differed significantly on only 4 of the 19 variables

(regulatory compliance, employee demographics, human capital valuation, and employee contracts/unionization). The MASI data also suggests that viewpoints do not differ between participants who experienced success or a lack thereof during the merger and acquisition process.

MASI and the Literature

Regarding the three most important variables, management effectiveness, culture, and human capital valuation, no original empirical studies were found evaluating management effectiveness as a critical decision point during the M&A process. However, directly related anecdotal literature suggests that management effectiveness is highly important to the success of the M&A effort. There are several examples of this research. Andrew's research of 1999 suggested that management effectiveness was critical to the selection of the M&A target, with the initial selection being critical to the eventual success or lack of success of the resulting enterprise. Management effectiveness is dependent upon avoiding management inter-group conflict (Berney, 1985). It appears that management tolerance to risk is also an influencing factor regarding the acquisition decision making process (Jemison et al., 1996). Steckel found that members will support and facilitate decisions to enhance their own utility within the organization—and not necessarily act in the best interests of the M&A process (1985). The MASI data concurred that management effectiveness was a factor critical to the success of the M&A effort see Table 11 for additional information. It appears that there are many factors that influence management effectiveness, and several previous researchers also judged this factor as important to the merger and acquisition process. However, there does seem to be some disagreement as to its place in line.

Previous research was found assessing the importance of culture as a decision point during the M&A process. In 1991 Pablo found that culture was a main decision driver during the M&A process, and influenced the level of integration achieved. Entrepreneurial cultures can have a direct effect on successfully consummating the deal (Sklar, 1996). M&A activity was found to cause a cultural gap that many organizational members simply cannot keep pace with; Roussel found that this attendant cultural shift drives many problems with integration attempts (1990). Mills suggests that culture is a critical part of the integration process and sometimes it is better not to integrate the two organizations (1999). Carey's research in 2000 disagreed and found that culture was overrated as an integration factor and concluded that financial factors should be weighed more heavily. The data derived in the study supports the majority of the literature that culture is an important factor in the M&A process (see Table 12), even though some researchers would argue over its rank on the list.

The related and anecdotal literature suggests that the notion of extrinsic human capital valuation lacks consistency, and that many different methods are used to calculate it. Rylatt (2004) argues that traditional accounting methods are not inclusive of the complex dimensions of human capital. Human capital needs to be an integrated part of the decision making processes, with a view that people are an investment—not just costs to be minimized (LeBlanc et al., 2000). In 2001 Sherman found that the quest for business growth is driving the creation of new human capital solutions and strategies; and these are primarily designed to attract new staff—not measure value. Research results from the MASI, as presented in Table 13, show that human capital valuation is one of the top three group variables in importance to manage if a given M&A effort is to succeed.

While the literature seems to agree that human capital valuation is important, no direct research was found ranking it within the context of an M&A decision process. This study suggests that human capital valuation is the key variable to measure during the M&A process.

No directly related original research was found comparing human resources versus other business management during the M&A process; however, anecdotal evidence does suggest an ongoing disagreement between the two groups and their view of the importance of people issues to the M&A process. In 1997 Thompson found that CEO's were at fault for a failure to consider people issues during the M&A process; this research also faulted human resource managers for not thinking in financial terms. Schmidt found that when those in the HR group were involved significantly and early in the M&A process, success rates were significantly higher (2001). Another study conducted in 2001 this time by Leonard concluded that mergers and acquisition often failed due to management's complete lack of focus on human factors and integration issues. Greengard's 1999 study found that when HR isn't involved up-front that integration efforts suffer, sometimes accruing stiff regulatory fines and legal actions. While the literature seems clear that the two groups have distinctly different viewpoints regarding M&As; no other research was found that attempted to identify and quantify these differences. In contrast, this study advances the notion that cooperation between HR and other business managers is critical to the success of the contemplated merger. While the MASI data in Table 14 does show variation in the means and four significant differences; it suggests that managers in the two groups are not as different as previously advanced by the literature. One basis for this contrast may be the homogeneity of the

population as to their level in the cross section of the organizations represented in the study, and therefore their degree of isolation from the decision process itself. It is possible that a homogenous group of executive level managers, with direct M&A decision responsibility would return more significant differences on the same instrument.

Regarding comparisons between participants of successful and unsuccessful M&As, no direct original research was found comparing the variables offered in the MASI. In 1999 Stopper found that companies who had created detailed integration plans experienced higher success rates than organization who did not invest the planning upfront. As previously mentioned Schmidt found higher success rates when HR was involved early in the process 1999; but no comparisons between successful or unsuccessful group was attempted. Earn-outs were shown to benefit of both buyer and seller and have a stabilizing effect on the new organization during integration and support M&A success (Kohers & Ang, 2000). While several tangentially related or anecdotal studies offer differencing viewpoints on the factors related to M&A success, none offered direct insight into the viewpoints of M&A participants who had experienced success or a lack thereof. This study offers new insight into this issue and suggests that while there are differences in the mean response data returned; there were no significant differences between the viewpoints of those participants who experienced success or a lack of success in previous M&As as shown in MASI Table 15.

Conclusions

Key outcomes of the study can be summarized as follows:

1. No significant differences were found between the views of M&A success yes/no groups.

2. Minimal significant differences were found (4 out of 19 variables) between the viewpoints of human resources and other business.
3. The three variable groups are important and should be considered.

From these outcomes the following conclusions are advanced:

1. Previous literature may need evaluation and modification.
2. Key players agree on the importance of integrating a human capital dynamic into the financial models under-girding the M&A decision.
3. The human capital variables that emerged from the literature as important for empirical quantification are validated by the study.

This research needed to be done because the literature review generated very little directly related original, empirical research on the subject of mergers and acquisitions. As previously noted, this may be due to a general lack of experience in the field and on the difficulty of conducting M&A research. Another factor may be that this is a relatively new field of scholarly inquiry and time will be needed to build a comprehensive literature base.

There is the critical need for education and training of executive management engaging in M&A activity. It seems that management may embark on a business integration mission with relatively little planning or knowledge of the comprehensive nature of the process. Concomitantly, human resource management must broaden their focus to include valuing their people in financial terms so that they may be included in financial models and thus influential when business decisions affecting people are being made throughout the M&A process. In short, human resource professionals must

embrace the economic dimensions of human capital, if they are to facilitate being valued and involved throughout the merger process.

There were surprisingly minimal significant differences between the viewpoints of human resources and other business management; the researcher expected more significant differences. This may be due to the fact that while many of the participants were employed in area businesses, they may not have had the significant, direct M&A experiences that the MASI was designed to reach. Additionally, the fact that there were no significant differences between those participants who indicated they had experienced success with M&As and those participants who noted a lack of success—also came as a surprise. This again could be due to the “lack of bumps and bruises” on the 92 respondents to the MASI. It may be that if the instrument were re-run with a group of seasoned, high-level M&A executives the results between human resources and business other would be more significant; and that there would be at least some significant differences between the success/yes/no groups.

Significance of Study

This study is significant in four overarching ways:

1. An original research survey (MASI) was created to research 19 variables suggested by the literature and experience of the researcher; that instrument, the MASI, appears to have a high level of face validity based on survey data and its subsequent analyses.
2. Of the 19 variables, one in each group was rated significantly higher than most others by survey participants: management effectiveness in the M&A process set of variables, culture among the identifiable human

capital factors, and human capital valuation within measurable manifestations.

3. The study suggests that there are significant differences in the viewpoints of human resources and other business management regarding the M&A process within two of the identifiable factors and two measurable manifestations—but not within the decision making group.
4. The study also suggests that there are no significant differences in the viewpoints of participants who are successful or unsuccessful in their M&A experiences.

Limitations of Study

While this research project did produce valuable new knowledge that is generalizable to both the theory base and business practice, this knowledge must be couched within several limitations to the study:

1. The small sample size of respondents (92).
2. Participants were comprised of master's level human resource and business students at Colorado State University rather than high level business executives in Human Resources and Finances. A subsequent study should be undertaken to include Human Resources and Financial executives with high level, real-world M&A experiences.
3. Lack of previous original empirical research or literature focused on M&As from which to build upon.

Recommendations

The research suggests a two-tiered approach to recommendations, specifically to the business and academic communities. Business recommendations have been by necessity short-term and very practitioner based; while the academic side, they have been more long-term and geared toward advancing theory, which may at some point integrate with practice.

Implications For Business Practice

Businesses that are engaging in M&A activity would do well to heed the call of the many stakeholders of failed integrations. With failure rates running around 50%, several proactive steps can be taken by executive management to help ensure success of the new organizational entity:

1. Executive management can improve effectiveness by learning more about the M&A process and the critical human capital success factors that support the critical decision points during the merger and acquisition process.
2. Executive management, looking past the traditional numbers can embrace human capital factors that can contribute to the success of the M&A venture (e.g.: influence of culture).
3. Executive management can use enlightened metrics to determine human capital valuation on both sides of the deal table. This is achieved when CEOs begin to require human resource groups to think in financial terms as well as the more traditional human development philosophy, and not just in cost minimalization terms.

Future M&A Research

Scholars conducting research into M&A activity need to focus more on original empirical research, as most of the literature to date surrounding this subject is anecdotal in nature. The research that does exist tends to be either financially based or human centric in its focus; with little crossover between the two. This may be due to a lack of subject expertise in the M&A field and the difficulty accessing the necessary organizational gatekeepers to conduct the research. It is suggested that additional research be conducted in the several areas:

1. Attempts should be made to replicate this study with a larger and seasoned business population, in order to validate its results and build upon the new knowledge created in a more generalizable result.
2. Additional research needs to be conducted into the M&A decision making process, with attempts made to further isolate critical decision points, and develop a best practices model.
3. Human capital metrics are in a sorry state of affairs and need to be quickly brought into the 21st century if they are to be generally valuable to the M&A process. Research must be undertaken to identify an instrument panel of human capital metrics, with a goal of creating a system of user friendly measurements that may be adopted by practitioners in a broad range of businesses.
4. Where applicable, utilize an integrated research approach which incorporates both business management and human capital knowledge bases, with a goal of rapid applicability to practitioners in the field.

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APPENDICES

Appendix A: Human Subjects Committee Permission Letter



Office of Regulatory Compliance
Office of Vice President for Research
and Information Technology
Fort Collins, CO 80523-2011
(970) 491-1553
FAX: (970) 491-2293

MEMORANDUM

TO: Gary Geroy, School of Education, 1588
FROM: Janell A. Meldrem, Administrator
Human Research Committee
SUBJECT: **PROJECT APPROVAL**
Title: Human Capital Metrics: A Critical Decision Point During the Merger and Acquisition Process
Protocol No.: 05-094H
Funding Agency: N/A
DATE: April 28, 2005

The above-referenced project was approved by the Human Research Committee on April 8, 2005 for the period April 8, 2005 to April 8, 2006. Because of the nature of this research, it will not be necessary to obtain a signed consent form. However, all subjects must receive a copy of the approved cover letter printed on department letterhead. The requirement of documentation of a consent form is waived under § __.117(c)(2).

Approval is for a maximum of 600 participants.

A status report of this project will be required within a 12-month period from the date of approval. Renewal is the Principal Investigator's responsibility, but as a courtesy, you will be sent a reminder approximately two months before the protocol expires. The Principal Investigator will report on the numbers of subjects who have participated this year and project-to-date, about problems encountered, and provide a verifying copy of the consent form or cover letter used. The necessary form (H-101) is available from the Regulatory Compliance web page (see below). Should the protocol not be renewed before expiration, all activities must cease until the protocol has been re-reviewed.

It is the responsibility of the investigator to immediately inform the Committee of any serious complications, unexpected risks, or injuries resulting from this research. It is also the investigator's responsibility to notify the Committee of any changes in experimental design, participant population, or consent procedures or documents. This can be done with a memo which completely describes the changes and their consequences (new consent form or cover letter, or altered survey instrument, for example). Students serving as Co-Principal Investigators may not alter projects without first obtaining PI approval. The PI is ultimately responsible for the conduct of the project.

This approval is issued under Colorado State University's OHRP Federal Wide Assurance 00000647. If approval did not accompany a proposal when it was submitted to a sponsor, it is the researcher's responsibility to provide the sponsor with the approval notice.

Please direct any questions about the Committee's action on this project to me for routing to the Committee. Additional information is available from the Regulatory Compliance web site at <http://www.research.colostate.edu/rcoweb/>.

Attachment
cc: August Bruehlman w/attachment

Animal Care and Use · Drug Review · Human Research · Institutional Biosafety · Radiation Safety
321 General Services Building · www.research.colostate.edu/rcoweb/

Appendix B: Survey Introduction and Consent

M&A RESEARCH

Page 1 of 2

YOU ARE INVITED TO PARTICIPATE IN M&A RESEARCH

[Click Here to Start Survey](#)



You are being asked to participate if you EITHER have been involved in M&A's OR MAY BE at some point in the future. The questionnaire is being conducted via the web and should take about 10 or 15 minutes or less to complete. Those who complete the survey are eligible for \$100, \$50, and \$25 cash drawings.

Mergers and acquisitions are increasingly becoming a common part of business, globally. This research study is part of a Ph.D. dissertation at Colorado State University, by Augie Bruehlman, with Gary Geroy Ph.D. as advisor and principal investigator. The research focuses on Human Capital Resource Management issues during mergers and acquisitions.

The title of the study is "Human Capital Metrics: A Critical Decision Point during the Merger and Acquisition Process." This topic arose after Mr. Bruehlman worked as a business executive involved in many acquisitions over several years—sometimes with mixed results due to people issues and other related factors. The goal of this research is to identify and assess the importance of people-centric issues during merger and acquisition decisions, with a long-term vision of developing better ways of evaluating and conducting these types of transactions. In order to accomplish this goal, your help is needed to gather a broad base of information related to planned or actual M&A activity.

You can be assured that your responses are completely anonymous. Each response will generate a text file email message that will be sent with no identifying information (IP address, email address, etc.) The researchers do not have direct access to the web site. Some companies track their employees' email and web site usage, so your decision to participate might be noted by your company. The company, however, will not have access to your responses.

You will need to complete the survey and then click to a separate site to enter the drawing. There is NO connection between your anonymous responses and the information you voluntarily enter for the drawing. Only one response and prize entry is allowed.

There are no known risks to participating in this study. There are also no known direct benefits to you in participating in the study; however, we hope that you will have the satisfaction of knowing that you have made an important contribution to research relevant to people involved in mergers and acquisitions. If you have any questions, you may reply using the contact information below. Although your participation is welcomed, needed and encouraged, your participation in this study is voluntary. By completing the questionnaire, you are agreeing to participate in the study. No other participation is required after completing the survey. Questions about participants' rights may be directed to the Regulatory Compliance Office, c/o Celia Walker, at (970) 491-1563.

Thank you for your interest and participation in this research. After collecting and analyzing the data, a summary of the study's results will be posted on the website later this spring. Both you and your employer will be able to access the summary using the same link you used to participate in the survey.

<http://soegrad.colostate.edu/students/bruehlman/indexold.htm>

7/12/2005

Gary D. Geroy Ph.D.
Professor of Human Resource Studies
(970) 491-5097
gary.d.geroy@colostate.edu

August P. Bruehlman
Ph.D. Candidate
(970) 224-9905
bruehlman@comcast.net

[Click Here to Start Survey](#)

<http://soegrad.colostate.edu/students/bruehlman/indexold.htm>

7/12/2005

Appendix C: Merger & Acquisition Survey Instrument (MASI)

Merger & Acquisition Survey

General Information

For the purpose of ensuring response consistency when completing the M&A survey several definitions will be offered. An acquisition is when one company buys another, the purchase may be friendly or unfriendly, and the terms and types of transactions vary widely. Mergers occur when two companies agree to “join forces;” they are usually friendlier than acquisitions. Due diligence is a fact-finding period prior to closing the deal with the intent of verifying buyer/seller suppositions and purported “goodness” of the deal. Integration occurs when two companies attempt to create a new combined organization from the previously separate organizations. Hewlett-Packard’s purchase of Compaq is a good example of an acquisition.

The M&A Decision Process Variables

Please rate the importance of the following overarching factors in the M&A decision making process.

(7 point rating scale--1 = very low importance; 2 = low importance; 3 somewhat unimportant; 4 = neither important or unimportant; 5 somewhat important; 6 = high importance; 7 = very high importance)

1. Management Effectiveness

Management’s strategic motivation, overall tactical plan, and how well line and staff integration operations are executed.						
○ 1	○ 2	○ 3	○ 4	○ 5	○ 6	○ 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

2. Governmental Regulations

Local, state and federal regulatory and legal requirements that affect the contemplated M&A.						
○ 1	○ 2	○ 3	○ 4	○ 5	○ 6	○ 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

3. Human Capital Issues

The people side of any particular transaction, which could include HR management, compensation, benefits, training, risk management, security, people specific legal issues, language and cultural issues, and other personnel factors specific to a given deal.						
○ 1	○ 2	○ 3	○ 4	○ 5	○ 6	○ 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

4. Technology

Includes merger-acquired technology, information systems, manufacturing process issues, communications incompatibility, and technology based intellectual capital.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

5. Business and Transaction Factors

Includes proposed transaction structure, business fit and compatibility, pricing, type of deal, and buyer/seller issues.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

Identifiable Human Capital Factors

Please rate the importance of the following subset of Human Capital Issues during the M&A process. (7 point rating scale--1 = very low; 7 = very high importance)

1. Culture

The customs and embedded social mores of any given organization.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

2. Regulatory Compliance

Local, state and federal regulatory and legal requirements that specifically affect the people side of the contemplated M&A.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

3. Employee Policies

Organization developed rules and guidelines, as distinct from law, which govern the administration of a given organization s members.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

4. Organizational Behavior/Organization Development (OB/OD) Issues

Organizational behavior issues are those which occur on a micro-level and may be attributed to the individual; organization development or change management issues currently underway in the target or acquiring organization or now underway due to the proposed M&A.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

5. Compensation & Benefits

The total compensation plan within each affected organization.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

6. Employee Demographic Attributes

Personnel demographics (both companies), including job titles, management structure, geographic location, liberal versus conservative, climate, self-directed teams, and union versus non-union environments.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

Measurable Human Capital Attributes

How important is it to have an objective measure of each of the following when considering whether to proceed with an M&A? (7 point rating scale--1 = very low; 7 = very high importance)

1. Turnover

Leaving the organization for any reason, any employee category or duration of service including commonly tracked churn and annualized monthly terminations.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

2. Human Capital Valuation

Ways to quantify productivity, revenue, or ultimately value for any given employee, group, or organization.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low	Low	Somewhat	Neither important or	Somewhat	High	Very high

importance	Importance	unimportant	unimportant	important	importance	importance
------------	------------	-------------	-------------	-----------	------------	------------

3. Employee Readiness To Merge Index

How willing and prepared a given organization's employees are to successfully integrate into the newly created organization.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

4. Cost Per Employee

Individual or average cost per employee to the business as a factor in the M&A. Could be thought of as an inverse to human capital valuation; typically payroll including employee benefits and other burden costs.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

5. Cultural Fit

Results of a cultural assessment tool or consultative intervention. Assessments of this type come in countless varieties, cultural compatibility.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

6. Employee Availability

Employee productivity days; remaining after subtracting absenteeism, sick days, disability plans, various leaves, and vacation within a given organization. This is an indicator of employee time-on-task or employee work-time.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

7. Employee Contracts /Unionization

The number and type of employee labor contracts. Review of union activity or if unionized a thorough review of ratified contract and renewal date.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low Importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

8. Compatibility of Company Employee Policies

How compatible the formal (written) and informal policies of each organization are. Examples could be flex-time, absenteeism tolerance, employee participation, termination policies.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

Demographic Questions

1. Please indicate your primary job responsibility area.

- Accounting
- Finance
- Human Resources
- Information Systems
- Management (General)
- Manufacturing
- Marketing/Sales
- Other _____

2. How is your organization structured?

- Entrepreneurship
- Not For Profit
- Private Corporation
- Public Corporation

3. What is the approximate annual sales revenue of your division/site?

- < 1 Million \$
- 1 Million \$ < 10 Million \$
- 10 Million \$ < 100 Million \$
- 100 Million \$ < 1 Billion \$
- > 1 Billion \$

4. What is the industry segment of your organization?

- Education
- Financial
- Health Care
- Manufacturing
- Services _____
- Other _____

5. Have you personally been involved in mergers or acquisitions? This could include planning, due

How compatible the formal (written) and informal policies of each organization are. Examples could be flex-time, absenteeism tolerance, employee participation, termination policies.						
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very low importance	Low importance	Somewhat unimportant	Neither important or unimportant	Somewhat important	High importance	Very high importance

Demographic Questions

1. Please indicate your primary job responsibility area.

- Accounting
- Finance
- Human Resources
- Information Systems
- Management (General)
- Manufacturing
- Marketing/Sales
- Other _____

2. How is your organization structured?

- Entrepreneurship
- Not For Profit
- Private Corporation
- Public Corporation

3. What is the approximate annual sales revenue of your division/site?

- < 1 Million \$
- 1 Million \$ < 10 Million \$
- 10 Million \$ < 100 Million \$
- 100 Million \$ < 1 Billion \$
- > 1 Billion \$

4. What is the industry segment of your organization?

- Education
- Financial
- Health Care
- Manufacturing
- Services _____
- Other _____

5. Have you personally been involved in mergers or acquisitions? This could include planning, due

diligence, integration or your company being bought or sold.

- Yes
- No

6. If you have been involved in M&A transaction/s please rate your perception of the success of the process. (7 point rating scale--1 = very unsuccessful; 7 = very successful)

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
Very unsuccessful	Low success	Somewhat unsuccessful	Neither unsuccessful or successful	Somewhat successful	Highly successful	Very successful

Open Ended Questions

1. Based on your personal experience, are there other factors not included in the survey that you feel are important; or included factors that need additional explanation; if so please list and explain.

2. If you were personally leading a merger or acquisition what are the points you would consider most crucial to a successful outcome?

Thank you for taking the time to complete the survey!

Thank you for your interest and participation in the survey.

You are now eligible to participate in one of three cash drawings for \$100, \$50, or \$25, depending on when you completed the survey. You will need to go to a separate site to enter the drawing. You do not need to enter the drawing. You may only participate once in the survey and drawing.

[Click here to enter the drawing.](#)

Thank you to the 91 people who took the time to complete the M&A Survey.

Three winners have been drawn:

The first prize winner is from Lakewood and won \$100.

The second prize winner is from Thornton and won \$50.

The third prize winner is from Frederick and won \$25.

Prizes will be mailed and should be received soon.

Later in 2005, the results of the M&A survey will be posted on the CSU website using the same URL that you clicked to access the survey.

Gary D. Geroy Ph.D.
Professor of Human Resource Studies
(970) 491-5097
gary.d.geroy@colostate.edu

August P. Bruehlman
Ph.D. Candidate
(970) 224-9905
bruehlman@comcast.net

Appendix D: Survey Email Communications

E-MAIL COMMUNICATIONS

Initial Email

The initial e-mail from the administrative contact for the M&A survey read as follows:

You have been selected to participate in a brief online survey. The study hopes to identify and assess the importance of people-centric issues during merger and acquisition decisions. You have been chosen to participate in the study as you represent an important segment of the target population – Master’s level business and human resource students. This survey is from a Colorado State University PhD candidate who has obtained the cooperation of the schools of Business, and Human Resource Studies.

Drawings will be held for 3 cash prizes (\$100 within 3 days), (\$50 within 6 days), and (\$25 within 9 days). They are being offered as incentives and in appreciation for your time needed to participate in the research!

Your participation is completely voluntary, and your decision whether or not to participate will not affect your status in any CSU program. Confidentiality and anonymity are ensured. You will not be individually identified with your questionnaire or responses.

The survey should take approximately 10-15 minutes or less to complete. To learn more about the survey and participate, please click on the following link: <http://soegrad.colostate.edu/students/bruehlman/>

If the link does not work from this page, please copy and paste the link into a new browser window. If you have questions or problems, contact Augie Bruehlman at bruehlman@comcast.net or (970) 224-9905.

As noted, the link took them to the letter. After reading the letter, they clicked on a second link which took them to the secure web survey.

Reminder Email

Three days after the initial message sent by the administrative contact regarding the M&A survey, a follow-up message was sent as a reminder notice to all potential participants.

This email is a reminder of your selection to participate in the web survey to identify and assess the importance of people-centric issues during

merger and acquisition decisions. This survey is from a Colorado State University PhD candidate with the cooperation of the schools of Business, and Human Resource Studies. If you have not done so, please complete the survey. Thank you, if you have already completed your survey. Please complete only one survey.

Two cash drawings will be held for (\$50 within 6 days) and (\$25 within 9 days). They are being offered as incentives and in appreciation for you to participate in the research!

For those who have not participated, your participation is completely voluntary, and your decision whether to participate will not affect your status in any CSU degree program or any courses you are currently enrolled.

The survey should take approximately 10-15 minutes or less to complete. Please click on the following link to learn more and to participate:
<http://soegrad.colostate.edu/students/bruehlman/>

If the link does not work from this page, please copy and paste the link into a new browser window. If you have questions or problems, contact Augie Bruehlman at bruehlman@comcast.net or (970) 224-9905.

The same link was provided that took them to the letter. If they chose to participate, they clicked on the second link in the letter that took them to the survey.

Final Email

Three days after the reminder email, one last follow-up message was sent by the administrative contact for the M&A survey to all potential participants.

This message is one last reminder of your selection to participate in the web survey to identify and assess the importance of people-centric issues during merger and acquisition decisions. For those who have already participated in the survey, you may disregard this message, and the Colorado State University PhD candidate thanks you.

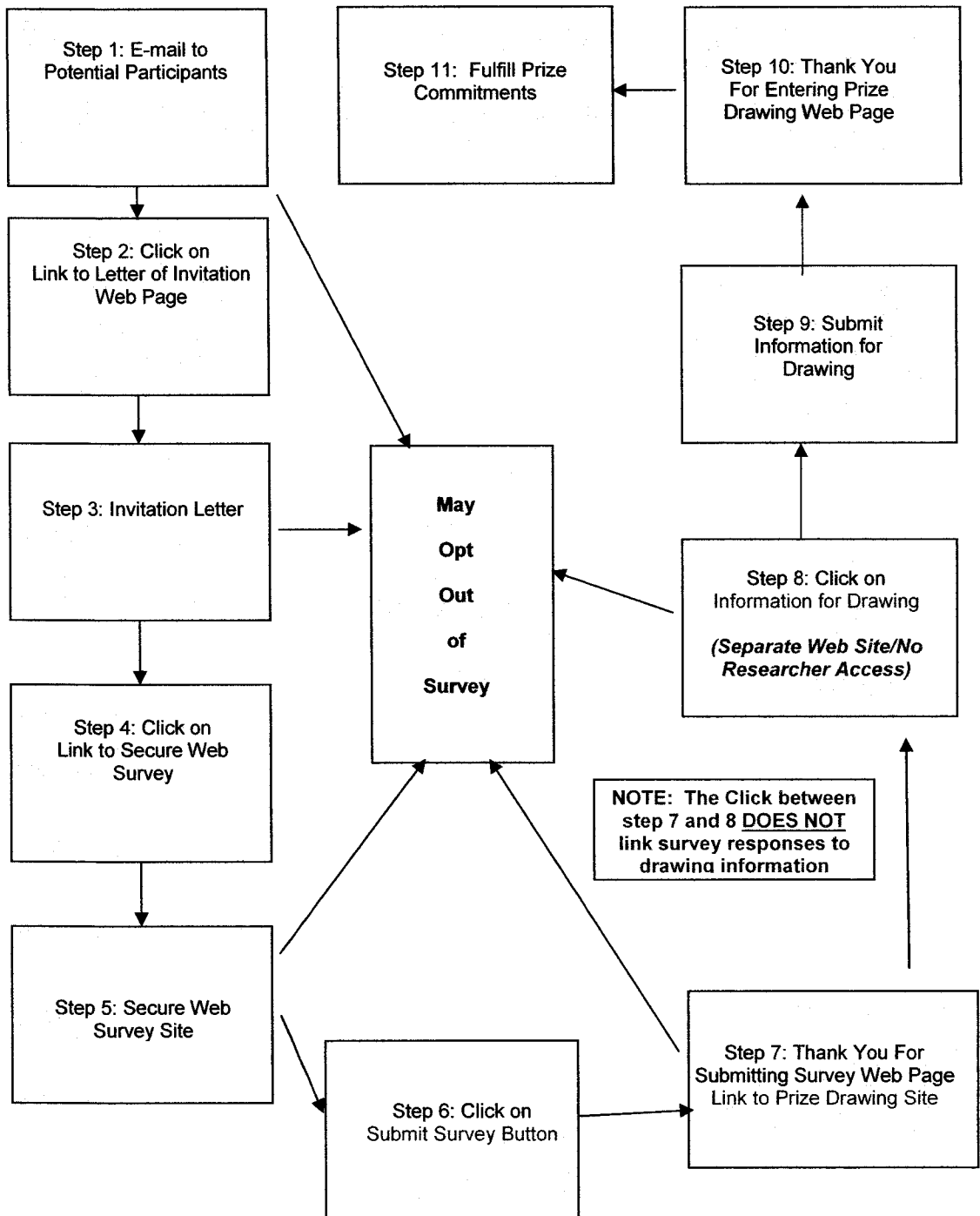
A cash drawing will be held for (\$25 within 9 days) of initial email. It is being offered as an incentive and thanks to you, for participating in the research!

If you have not participated yet, your participation is completely voluntary, and your decision whether or not to participate will not in any affect your status in any CSU program. It should take approximately 10-15 minutes or less to complete. Please click on the following link to learn more and to participate: <http://soegrad.colostate.edu/students/bruehlman/>.

If the link does not work from this page, please copy and paste the link into a new browser window. If you have questions or problems, contact Augie Bruehlman at bruehlman@comcast.net or (970) 224-9905.

The same link was provided that took them to the letter. If they chose to participate, they clicked on the second link in the letter that took them to the survey.

Appendix E: Survey Flow Chart



Appendix F: CSU Survey Permission Letters



School of Education
1588 Campus Delivery
Fort Collins, Colorado 80523-1588

HRC Administrator
Regulatory Compliance
321 General Services Building
Campus 2011

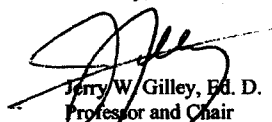
Dear Human Research Committee:

Please be advised that permission has been granted to August Bruehlman Co-PI to administer a secure web survey to selected Colorado State University Graduate Human Resources Students from the Denver Center masters program in Organizational Performance and Change (OPC).

The survey shall adhere to the following guidelines:

1. The survey will not be conducted prior to obtaining HRC approval.
2. Only the survey entitled "Merger and Acquisition Survey Instrument" as approved may be used.
3. Survey protocol and data usage will strictly adhere to H100 as approved by HRC and Chapter 3 Methodology of the dissertation entitled "Human Capital Metrics: A Critical Decision Point During The Merger And Acquisition Process."
4. Participants will be limited to current or former students that have participated in the master program in OPC at the Denver Center.
5. An incentive program to may be used to increase the participation rate as described in H100 and supporting documentation.
6. Any unforeseen issues will be discussed and addressed in advance of survey execution.

Sincerely,



Jerry W. Gilley, Ed. D.
Professor and Chair
Organizational Performance and Change
Colorado State University



Knowledge to Go Places

Jackie L Hartman
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HRC Administrator
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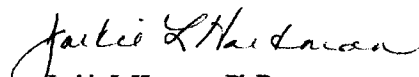
Dear Human Research Committee:

Please be advised that permission has been granted to August Bruehlman Co-PI to administer a secure web survey to selected Colorado State University Graduate Business Students.

The survey shall adhere to the following guidelines:

1. The survey will not be conducted prior to obtaining HRC approval.
2. Only the survey entitled "Merger and Acquisition Survey Instrument" as approved may be used.
3. Survey protocol and data usage will strictly adhere to H100 as approved by HRC and Chapter 3 Methodology of the dissertation entitled "Human Capital Metrics: A Critical Decision Point During The Merger And Acquisition Process."
4. Participants will be limited to current or potentially up to and including former students within three years of graduation or separation from the University.
5. An incentive program may be used to increase the participation rate as described in H100 and supporting documentation.
6. Any unforeseen issues will be discussed and approved by the department in advance of survey execution.

Sincerely,


Jackie L Hartman, Ph.D.

April 13, 2005

Center for the Study of Global Business
College of Business
Rockwell Hall
1270 Campus Delivery
Fort Collins, Colorado 80523-1270 U.S.A.
Phone: 970.491.7266
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E-mail: CenterSGB@business.colostate.edu
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HRC Administrator
Regulatory Compliance
321 General Services Building
Campus 2011

Dear Human Research Committee:

Please be advised that permission has been granted to August Bruehlman Co-PI to administer a secure web survey to selected Colorado State University Graduate Business Students.

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1. The survey will not be conducted prior to obtaining HRC approval.
2. Only the survey entitled "Merger and Acquisition Survey Instrument" as approved may be used.
3. Survey protocol and data usage will strictly adhere to H100 as approved by HRC and Chapter 3 Methodology of the dissertation entitled "Human Capital Metrics: A Critical Decision Point During The Merger And Acquisition Process."
4. Participants will be limited to students in BG 665, Strategic Management, Denver Executive MBA Program.
5. An incentive program to may be used to increase the participation rate as described in H100 and supporting documentation.
6. Any unforeseen issues will be discussed and approved by department in advance of survey execution.

Sincerely,



Hunt Lambert, Instructor
Department of Management
Hunt.Lambert@colostate.edu

Printed on recycled, acid-free paper.

March 31, 2005

HRC Administrator
Regulatory Compliance
321 General Services Building
Campus 2011

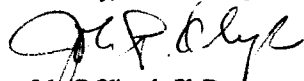
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3. Survey protocol and data usage will strictly adhere to H100 as approved by HRC and Chapter 3 Methodology of the dissertation entitled "Human Capital Metrics: A Critical Decision Point During The Merger And Acquisition Process."
4. Participants will be limited to students currently enrolled in BG 616.
5. An incentive program to may be used to increase the participation rate as described in H100 and supporting documentation.
6. Any unforeseen issues will be discussed and approved by department in advance of survey execution.

Sincerely,



John P. Olienyk, Ph.D.
Professor, Department of Finance & Real Estate
John.Olienyk@ColoState.EDU