The Human Element – The Impact of Mergers and Acquisitions on Organizations and People

By

Ralf T. Faber

Diplom Engineer, Technology College Mannheim, Germany, 1989

Submitted to the MIT Sloan School of Management in Partial Fulfillment of the Requirement for the Degree of

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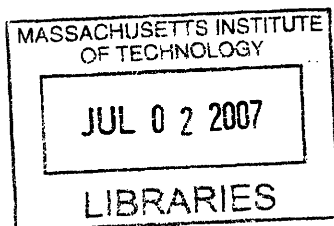
Signature of Author: ______________________________
MIT Sloan School of Management
May 11, 2007

Certified by: ______________________________
John Van Maanen
Erwin H. Schell Professor of Organizational Studies, Thesis Supervisor

Accepted by: ______________________________
Stephen J. Sacca
Director, Sloan Fellows Program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Abstract

The concept of this thesis emerged from my own experience of mergers and acquisitions in which I had been involved over the past 20 years. Companies make acquisitions, mergers, or joint ventures for technology or geographical reasons, or to consolidate a market. The companies have to find a way to integrate the two organizations, and typically they face the challenges of combining different business philosophies, visions, leadership styles, and technology innovation management that have developed and manifested over an extended period of time of time.

The motivation for the most companies to get involved in acquisitions is to maintain the growth rate, get access to new ideas, and processes that will provide a lasting benefit for the organization. In the thesis, I will examine the difficulties of the integration of one entity into another. Often, companies are acquired for their people's talent and expertise. The cultural and human aspects, however, are not a major consideration during the overall due-diligence process.

I conclude that the extremely high failure rate of more than 50% for mergers and acquisitions is a result of the negligence of a formal cultural and human due-diligence process, and a "human capital balance sheet" needs to become a part of the process.

Advisor: John Van Maanen
Erwin H. Schell Professor of Organizational Studies

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CHAPTER 1 - INTRODUCTION

The Problem Definition

Companies are sold or bought every day. The objectives for these deals are diverse as firms reorganize, consolidate or reinvent themselves through mergers and/or acquisitions. M&A's historically are often done for financial reasons and designed by solicitors and lawyers with the human element taking a low priority. Change is never easy and executives, who make the merger/acquisition decision, envision a logical melding of the two entities, but the process often is far more psychological. Bringing together two companies successfully is fundamental to accelerating growth and creating additional shareholder value. Recent research shows however that 50% - 80% of mergers and acquisitions either fail or do not deliver shareholder expectations (Thompson Financial Services, 2005).

A short description of the diversity across merger activity is given by Joseph L. Bower (2001).

> **"It's common to lump all M&As together, but there are five distinct varieties. If you can tell them apart, you stand a better chance of making them succeed."**

I have been personally involved in mergers and acquisitions several times and I have had to lead and manage the integration process. These created challenging situations where the executives and the integration team had to make long reaching decisions in an extremely short time without having good information. Only a few people had experience in the integration process and often the strategic objectives for the deal and future

expectations were not clear to the integration team. This is specifically the case for deals where a small company is acquired by a larger firm in order to gain access to intellectual property (IP) and key talent in a "hot" industry such as telecommunications or internet companies in the mid to late 1990's.

This thesis examines how mergers and acquisitions change the way people work and tries to understand how critical it is to blend the cultures and processes of both businesses. Some companies make the mistake of trying to integrate too much too quickly. They soon lose the winning essence of the acquired business that made the target company so attractive to them in the first place. Equally, companies may not even try to integrate effectively leaving the two companies isolated from one another with no economics of scale and with an "us versus them" culture.

This study tries to understand and articulate the motivation of companies to acquire another entity. I examine the design of mergers and acquisitions from a human perspective and will investigate the impact on the people and organizations on both sides after the "honeymoon" period is over. I have narrowed the focus of my research to companies in which founders, senior managers, executives, and other key leaders are involved and who are also major stakeholders. This seems to be an area with a specific pattern of problems. The leaders with significant equity ownership in the acquired companies with their suddenly increased wealth, have a critical role in the success of the newly merged company.

There are many crucial aspects of managing acquisitions and the integration of both entities. The acquiring side typically does a thorough analysis on the front end of the deal; identifying the right acquisition target through due-diligence of the tangible and intangible assets and other key characteristics of the companies on the radar screen. However, often, little time is spent on how to merge the people of the two acquisitions. Will the new organizational members fit in the new corporate culture? What policies, procedures and IT systems will the new addition really need? Or, simply what is helpful to both companies and needs to be protected and preserved? Setting and agreeing on the objectives and expectations of an acquisition on the executive level is important. But, it is as important to communicate these goals to the teams and employees in the merged company who are involved in the actual integration process.

Much has been written about mergers and acquisitions, especially in the academic literature (e.g., Bower, 2001; Vermeulen, 2005). However, as noted, many acquisitions still fail to produce the expected results.

Research Method

As said, I have narrowed the focus of my research to companies in which founders and senior executives were also major stakeholders. When the legal documents are signed and the integration process begins, things change from the founder's perspective. How willing are the involved parties to adjust and how motivated are they to change and continue their managerial work in light of their increased personal wealth?

Specific research methods include:

- Bibliographical research, my own experience; and interviews (n=12) with Sloan Fellows and MBA's to develop a set of cases on mergers and acquisitions;
- Construction of a personal case study of one acquisition (Corning/NetOptix).The case looks specifically at the mid- and long-term implications of the merger on people and organizations and tries to calculate the results from a human perspective.

The interviews were with people who had experience on both the acquirer and the acquired sides. They were conducted in a conversational style rather than following a set of formalized questions. However, I did ask pointed questions if I had the feeling the discussion was drifting in an undesired direction. I interviewed people from different levels of the organization – executives, managers in sales, manufacturing and research & development. The interviews typically took 1- 2 hours. At the outset of my interviews I acquired about the background of the person interviewed and moved into the acquisition discussion. With founders of companies, I used questions such as: "When did you start this company? What was the culture in the early days and how did it change over time?" I also inquired about the pre-acquisition situation in the company. A brief summary of the market and the financial position of the company was given as well as a description of the company culture and the management style. The third part of my interviews concerned the integration period. The discussions here focused on the transition period and the

experiences reported about the people involved on both sides. Typical questions were:

> "Please describe in detail the integration process".
>
> "Did you use a framework?"
>
> "Were employees from both sides involved in this process?"
>
> "Did the people who were involved have experience with the integration of one company into another?"
>
> "How did the employees react to the proposed changes?"

In the final part of my interviews, I asked whether the merger was viewed as a success by the respondent and we discussed the actions taken during the integration period as they related to the interviewee's judgement of the success (or lack thereof) of the acquisition. In particular we talked about the cultural and administrative changes in the post-merger period, employee retention issues, and the desired and achieved synergies.

These interviews were conducted from November 2006 through April 2007. The data and information gathered from this study and interviews demonstrate the impact of M&As on the organizations and people of the companies involved. Based on these results, I put forth in Chapter 6 a few innovative methods that might lead to a more structured and practical approach to the integration process and perhaps improve the prospects of the long-term success of the merger.

CHAPTER 2 – HISTORICAL OVERVIEW OF MERGERS AND ACQUISITIONS

Since industrialization took hold in the 19th century, mergers and acquisitions appear to occur in cycles – each cycle with specific objectives and moldings. The first M&A wave was marked by horizontal mergers. The objective was to achieve a dominant market position mainly through company acquisitions.

In early 2003, we experienced the 5th M&A cycle. It started in 1993 and reached its peak in 2000 with the crash of the stock market (Picot, 2002).

With the increasing globalization of the international markets, this wave was dominated by international mergers and acquisitions. In the early 1980's, only 12% of all M&As were international. This number increased to 40% in the early 1990s. The rate of "successful" M&A's, however, is dismal. According to recent research, 50%-80% of all M&As fail. Such failures occur for different reasons. Yet, to unearth these reasons is difficult (Picot, 2002).

Insufficient planning prior to the deal and the lack of a comprehensive integration plan is certainly one reason. Another is the lack of sensitivity for the so called "soft factors". These soft factors usually reflect major differences in company cultures. Cultural conflicts and anxiety related to upcoming changes are often enhanced by insufficient information and communication by management. On the operating levels of both sides, this can have a negative impact in quality, motivation, satisfaction, personnel turnover and physical and mental "absence".

Today's business environment is dominated by mergers and acquisitions and fast growth. In order to be a player in highly competitive markets, expansion of firms is necessary. It is almost impossible to achieve the required growth rates simply from organic growth. Growth is achieved through a combination of internal product development, acquisition of companies, and business development activities. Financial markets and competitive pressures lead also to growth demands. But, corporations must understand both the financial and technological difficulties of the acquisition process as well as the complex problems associated with the interaction of people when participating in mergers.

Acquisitions and mergers signify the combining of two or more companies into a single corporation. In business, a merger is achieved when one company purchases a majority equity ownership of another firm, thus absorbing the acquired firm into one corporate structure. This differs from a consolidation, in which several concerns are dissolved in order to form a completely new company. In a merger, the purchaser may make an outright payment in cash or in company stock or may decide on some other arrangement such as the exchange of bonds. The purchaser then acquires the assets and liabilities of the other firms. Mergers are often accomplished to revive failing businesses, to reduce competition, or to diversify production. In the U.S., however, fairly stringent antitrust laws are enforced to be sure that mergers do not result in monopolies.

M & A Trends

M & A activities in general are on an upswing since 2002 and are predicted to increase in the short and mid term. In 2000, all M & A activities together had a combined value of $3.4 trillion world-wide (see Appendix A). From 1994 until 2000 M & A activities had an annual growth rate of 33%. The market crash, and the burst of the "dot.com" bubble caused a steep decline of M & As in 2001. But, since 2002, deal making is back with an annual growth rate of approximately 50% in volume and close to 80% annual growth in the number of mergers and acquisitions (Thompson Financial Securities Data, 2005).

These trends are predicted to continue for the foreseeable future. Beside the fact that the cash on company's balance sheets is at record levels, there are other key drivers that most likely will keep the M & A trend sustainable. The data for the first quarter of 2007 shows that the IPO market has seen a strong increase in activity, with seventeen venture backed companies raising over $2 billion. Venture-backed merger and acquisition activity declined in the first quarter of 2007 compared to the first quarter of 2006. However, the average disclosed deal size was $162 million, one of the highest quarters in the last five years (Thompson Financial Data Services, 2005).

Another key driver for M & A activities is the strong world-wide and US economy and the record profits companies throughout all industries are recording. Cheap financing, strong stock prices, opportunistic investors and hedge funds are also helping to fuel the M&A momentum.

CHAPTER 3 – HUMAN DUE DILIGENCE

I argue in this chapter that companies entering into a potential merger or acquisition should make what I call "Human Due Diligence" a central part of their overall due-diligence process. The result would be a broader basis for decision making. This chapter investigates the objectives of "human due diligence" on different management levels of the involved companies.

Mergers and Acquisitions (M&A)

Phases

M&As can be divided into three phases. Each phase involves particular objectives and activities.

Pre-Merger Phase: Includes the extended planning period and results in an executive decision on the part of the acquiring firm as to whether a merger or an acquisition is the appropriate strategy to follow in order to achieve the company's long-term objectives. The planning and decisions made in this phase will determine the two subsequent phases.

Merger Phase: Includes the search, evaluation, pre-selection of potential targets, initial contact with the target, due-diligence, deal construction and execution.

Post-Merger Phase: Integration of the newly merged companies or the integration of the acquired company into the organization of the acquirer. In this phase, the depth and speed of the integration are essential. The efficient combination and execution of this phase largely determines the success of the merger or acquisition.

Due-Diligence

"Due-Diligence" is the systematic analysis, performed by investors, of a potential investment. It typically includes an examination of operations and management at the target firm and the verification of material facts. The due-diligence process consists of a quantitative and qualitative analysis of different areas in an enterprise. Quantitative focus points are finance, law, intellectual property, markets and environment. The qualitative analysis or the "soft-factors", such as human resources and management, are often neglected or underrepresented in this process (Clever, 1993).

The information and results gained through this process represent the strengths and weaknesses of the target company and provide an overall evaluation of the acquisition target. This analysis is then used as the basis for the acquisition decision, the valuation and, ultimately, the price the acquiring company is willing to pay.

Human - and Cultural - Due Diligence (HDD & CDD)

The success of acquisitions, I believe, depends heavily on the successful integration of people and not the money that is expended. Yet, few companies conduct a comprehensive cultural due diligence (CDD) or comprehensive human due diligence (HDD). Only a handful of consulting companies offer products in this area (e.g. Expatica Int., Emerge Int., iri-Consultants).

A HDD should include a systematic analysis of the company cultures and key personnel. Including cultural and human aspects in M&A due diligence began a few years ago on a small scale in American consulting companies (it is less used in Europe). There is no standard framework for HDD at this point. The intent of Human Due Diligence is to form a "basis for cultural decisions" which allows informed decisions making relative to the cultures and the human capital of the companies involved. This may help to reduce "cultural clashes" and increase the success of the acquisitions. The goal of company culture analysis and HDD is to identify cultural differences and to project the scope and impact these differences might have on the merged enterprises.

Typically, the financial acquirer will become the cultural leader and will press its own organizational structure on the acquired, with little or no due diligence as to the human and cultural capital of the acquired firm (Harding and Rouse, 2007). If due-diligence in these cases is to be accomplished, it must perform to distinct tasks:

(1) Diagnosis of the culture, human capital, capabilities and attitudes of the employees of the target company (and of the acquiring company as well).
(2) Assessment of compatibility of both cultures, both sets of personnel, and of both organizational structures.

Using the Human Due Diligence Analysis

Identifying and assessing cultural differences between organizations can be used for a number of strategic and operational decisions in deciding on post merger structural forms as well as helping to build a structural integration model (Clever, 1993). In skeletal form, HDD informs two broad directions.

Go/ No-Go Decision

If the result of the Human Due Diligence is that the cultural differences are too large, or that the willingness to change on either side does not exist, the merger negotiations should be cancelled and a revision of the long-range strategy is necessary. It is important that the target has the "right chemistry" and "cultural compatibility". Managers should be prepared to "kill" the deal if there is not a cultural fit.

Structural and Cultural Integration

The knowledge and the significance of cultural differences allow for the detailed planning of cultural integration This can then be tailored according to the needs of the companies involved. By using the HDD results, it is possible to develop a cultural integration strategy depending on the different organizational forms of the companies.

Three possibilities result:

Absorb: Highest grade of integration, both companies merge into one enterprise

Sustain: Maintain autonomy of the two companies; only defined pieces of the organization will be combined (e.g. IT, Financial Controls)

Symbiosis: Combination of absorb and sustain; This approach attempts to maximize "synergy" by exchanging products and services between the two entities but still maintain a degree of organizational autonomy in both organizations.

Similar to the structural integration, the grade or depth of integration can be split into the following:

Cultural Blending: The objective is to develop a new company culture for the combined enterprise by building on the strength and values from both companies (Fischer and Wirtgen, 2000).

Cultural Takeover: Structure and values of one company, usually the financial acquirer, is used for the combined enterprise. One company culture dominates the other. This is typical for acquisitions of a small firm by a large company.

Cultural Pluralism: Almost no blending or combination of the company cultures. Cultural differences are seen as a source of strength.

CHAPTER 4 – THE CORNING/NETOPTIX CASE STUDY

It is now seven years ago since Corning Inc. acquired NetOptix Corporation. The acquisition target was a small publicly traded company with an innovative process to manufacture high-tech fiber-optics components for the telecommunications industry. This small-cap company would open new markets for the acquirer and was supposed to help the buyer catch up with its competitors in the then, fast moving industry.

In this section, I look at the history of this deal and reflect on the motivation for the acquisition from both the Corning and NetOptix perspectives. In other words, I investigate both why this deal was done and how it was done. The case provides a look at a real life acquisition and discusses how the critical aspects of the acquisition such as the strategic objectives, organizational alignment, and integration were executed by the company and individuals involved. The case also looks into the different stages of the deal - pre-acquisition, integration process, and post-combination – and considers the broader, more general, aspects of the case. The narrative rests on my personal experience and interviews with others familiar with the deal. I interviewed executives from both sides, NetOptix and Corning who were involved in the deal making and/or in the execution of the integration.

Background

The "creation" of NetOptix Corporation occurred via two parallel but independent pathways. These finally met in early 1999. In the mid 1990s, I worked for Balzers &

Leybold GmbH (B&L) in Frankfurt, Germany. B & L was a German-Swiss high-tech company which developed and produced vacuum deposition systems which are used by customers for the manufacture of Compact Discs, DVD's, architectural glass, silicon wafers, eye-glass lenses and precision optics. I was responsible for the optics business. At the time, the optics business was rather small with little growth potential. I assumed then that it was only because of a long tradition and the past glory that Balzers & Leybold was holding on to this division.

In 1995, I and others in the firm noticed more and more requests for DWDM-products from our existing customers and from new companies unknown to us until then such as JDS-Uniphase in Canada and E-Tek Dynamics and Hoya in the U.S. These and other companies, were providers for electronic components and sub-systems used in the telecommunications industry. But, since the telecom industry "went optical" with the build-out of the fiber-optics network, the content of optics components increased dramatically. A completely new market with new players emerged for a company like Balzers & Leybold. For example, JDS-Uniphase was created through a merger of JDS-Fitel, Canada and Uniphase Corporation in the United States. Between 1999 and 2001 the company expanded quickly and made more than 12 acquisitions that had a price tag of at least $70 billion.

Corning was a late starter in the Photonics business, the technology that routes the optical signals and converts them from electronic waves into optical signals and back into electronic waves. Being the Number One supplier for optical fiber and cable, the long range strategy of Corning was to become the "technology leader" in photonics and capture the highest market share. To reach this goal, Corning went shopping for

technology and people. In less than two years, it acquired eight companies at a total cost of over $10 billion dollars.

DWDM – Dense Wavelength Division Multiplexing – is a technology that increases the capacity (the bandwidth) of optical networks by many factors. It works by simultaneously sending light signals at different wavelengths through an optical fiber cable. In 1994, Samsung Electronics of South Korea was the first company to approach B&L with the request for a system to produce optical components for fiber-optics technology that relied on DWDM.

The creation of the fiber optics network had started several years before. But the increasing use of voice and data communication (Internet) required more and more bandwidth. Although technically challenging, these new products developed into a large business for Balzers & Leybold with extremely attractive margins. The optics division turned into the largest B & L business in terms of revenue and profits at the turn of the century. In 2001, B & L was acquired by EQT, a private equity company in Europe.

Those of us in the company at the time also noticed that the products our customers produced on our machines were even more profitable than the machines. I tried to convince senior B & L management in Germany and Switzerland to provide the Funds and, enter the components business to go head-to-head with our customers. This attempt was unsuccessful and my partners and myself decided to form a start-up company in order to exploit this business opportunity.

Fundraising, proved difficult in Europe. Despite having an innovative product, a huge potential market, and an experienced managerial team in place, investors in Europe

were not interested. I then entered into negotiations with Lucent Technologies. A potential deal looked promising but did not work out at the end. I tried also to raise $15 million for approximately two years. My team and I were worried one that we be too late to enter this market. Through a business acquaintance in the United States we found an investor, Andlinger & Co of New York City to finance our venture.

Independent of my group, Andlinger & Co., a private investment and management firm with offices in the United States and Europe, made an equity investment in a small-cap NASDAQ company in1998, called Galileo. Galileo's business lines included women medical products, electro-optical components for missile guidance systems, and telecommunications components. Galileo was at the time essentially bankrupt and close to be de-listed by NASDAQ. It was managed by a temporary "crisis manager". For Andlinger & Co., their task with Galileo was twofold: (1) To improve the capital structure of the company by eliminating the severe losses and refinancing the company's debt; and (2) to focus the firm's resources on its core business (Andlinger & Co. web-page).

Andlinger & Co. brought our business into the Galileo rescue operation. The non-core businesses and assets of Galileo were sold and the firm refocused all its resources on producing DWDM-components for fiber-optics telecommunications systems in our operations in the United States and Germany. The company's name was changed to NetOptix Corporation. One year after taking control of Galileo, we were approached by a major customer who wanted to acquire the company. Shortly thereafter we sold NetOptix to Corning for shares.

The merger and acquisition process is outlined below:

Pre- Merger Phase: Prior to the deal, Corning became one of NetOptix's customers. We shipped product to Corning for more than six months. Then, at the end of January, I received a call from Corning and we started talking about a potential acquisition. The timeline was roughly as follows:

Internal discussion within NetOptix leadership and NetOptix board. Initial conversation between Corning M&A group and NetOptix (2 weeks)

Official negotiations between NetOptix and Corning, which included lawyers and bankers from large investment firms on both sides. Financial and technical due-diligence performed (2 weeks)

Approval process with company boards, SEC, FTC (2.5 months)

In the first part of the pre-merger phase, we had conversations in order to find out if there is a common ground for a potential acquisition. Those conversations were between senior managers of Corning and the NetOptix/Andlinger & Co. group. This period took roughly two weeks.

Merger-Phase: A thorough technical and financial due-diligence process was conducted as well as the actual merger negotiations. Human due-diligence was not part of this process, although, in retrospect, this would have been helpful for the eventual integration process.

Approximately two years before the NetOptix deal, Corning had acquired a privately held company in Massachusetts with a similar structure and products.

This provided a background for the NetOptix discussions because the previous acquisition did not work out as expected and in order to meet their goals Corning had to buy another company providing the same products and expertise.

Post-Merger Phase: This was a critical two-tier integration of the newly merged companies: NetOptix and the equivalent Corning division (formerly Optical Coating of America, OCA), and the integration of NetOptix into the Corning organization. Because the telecommunication industry was moving fast at the time, the depth and speed of the integration was essential. The efficient blending of strategies, organizations and company cultures mainly determine the success of the integration process and ultimately the success of the merger or acquisition.

Corning assigned a senior manager from the Photonics Division to support the integration and help to facilitate town house discussions and other information events. He also was the bridge to Corning headquarters and provided resources and contacts as needed within Corning.

As the integration manager, who left in the fall of 2000, stated:

> **"It was an unusual integration since you and NetOptix had the leadership role in the combined company while the Corning operations were following the NetOptix lead. I suspect that this dynamic made things difficult at Corning. We probably should have dealt with this issue in a more direct way since the NetOptix culture appeared to be quite different than Corning's.**

When the deal closed in mid May of 2000, we at NetOptix and Corning worked on a plan to merge the two entities into one combined organization with approximately 600 employees. The Corning division was much bigger in revenue and numbers of people employed. I was supposed to lead the combined organization and it was expected that part of the management team would consist of former NetOptix managers. To merge two organizations and build a management team comprised of the two former entities is difficult and takes time. Time we did not have. The speed with which the fiber-optics network build-out was executed at that time did not allow for a slow or gradual process. The average product lifecycle was estimated to be 18 months on the hardware side. Besides our own integration difficulties, we also had to manage the start-up of a large joint venture with Samsung Electronics in Korea.
Corning with its large in-house research and development capabilities did not have a culture of acquiring and integrating companies. However, despite its size, Corning could not develop the technology and products it needed fast enough. In order to catch up with their competitors, the company had to break with their traditions and acquire companies.

The Corning DWDM business was run in 2000 by an experienced Corning manager who was well respected and liked by his employees. However, it did not make economic sense to keep two senior executives for the same job. Yet, two senior managers was not an ideal structure. After the deal was officially closed and the leadership role was communicated, a combined team of Corning and NetOptix managers was supposed to run the company. From the outset there were many factors that made this difficult. The colleagues on the Corning side were under the assumption that everybody from "the other side became a millionaire through this deal".

In almost every part of the business, NetOptix had different procedures and policies from Corning. In the beginning, we made the most progress in the finance related areas and in human resources. This made sense since we were now a Corning division and these areas never were a core strength at NetOptix. Corning's resources in these areas were far more advanced compare to those of NetOptix.

In development and manufacturing, the integration process was more difficult and much slower. Most of the technical equipment used on both sides, such as the production machines, testing equipment, and development tools, were different. Also, the procedures and documentation in these areas were far more formalized at Corning than in the start-up environment at NetOptix, where a more "hands-on" approach was utilized than at Corning. Most of the Corning equipment was designed, built, and maintained in-house, while at NetOptix, commercially available equipment, modified to our needs, was used. Typically this is the opposite of what occurs in many mergers. The plan was to do a quick analysis and, based on performance, decide what types of equipment to keep and discontinue. However, I underestimated how much emotional attachment there was to the traditional approach at Corning. Therefore, progress was slow and a fight between what were seen as "two organizations" developed.

Often conflicts were silenced but it still felt as if the new organization was on two different paths. A combined effort, built on different perspectives, could have perhaps found common grounds. Silencing conflicts in organizations avoids the possibility of negative conflicts, but does not allow constructive conflicts. This limits creativity and learning.

Needless to say this was an extremely challenging task. For open and constructive conflicts to play out, people need an environment in which they feel comfortable. This is rarely the case shortly after a deal (see, also, Perlow, 2003).

As noted, shortly after the merger process had started, the combined organization was to also manage a joint venture with Samsung Electronics in Korea. Although, this was interesting and exciting, it was a large project which increased the work load for everyone. But, as a former Corning manager involved in the joint venture said, despite the increased work load, this project served as a catalyst for the Corning/NetOptix organization to work more close together.

Less than one year after the acquisition of NetOptix, the telecom bubble burst. Demand for most products plunged toward zero. From that point on, the focus of the merged entity changed from growth to downsizing.

J.-L. Malinge, formerly a Vice President and General Manager with Corning, summed up the NetOptix acquisition in the following way:

> **"What can you do with your integration process if the market collapses over night and business conditions are fundamentally different compare to before the acquisition"?**

Looking Back

The Corning/NetOptix example demonstrates some of the challenges acquisitions present. In the end, the acquisition of companies and technology is the acquisition of people (Chambers, 1998). And, the integration of people into an existing organization is

difficult. Both organizations, the acquirer and the company acquired, must be prepared for this step long before the real event happens. Combining two organizations requires sensemaking and inventions such that useful and valuable ways to create a new more innovative and more powerful organization are discovered and put into play. The acquired must be made to not feel humiliated, frustrated and anxious. Authority structures, managerial practices, temporal pressure and cultural differences must all be managed (Perlow, 2003).

In the NetOptix/Corning acquisition, this was not the case. Moreover, the combined organization never had time to develop its own unique approach.

CHAPTER 5 - ANALYSIS

Impact of Acquisitions

In this chapter, I discuss why corporate cultures clash, and consider the impact of acquisitions on individuals, corporations and the society. I examine the long term consequences of these deals and the effect on employee moral and loyalty. After reviewing the acquisitions research literature, examining my own case, and interviewing merger participants, I found a common pattern across almost all acquisitions. Because of cultural incompatibilities M&A activity can lead to stress, anger, dismay, and notorious skepticism. These factors can result in various physiological and psychological outcomes. Whether the merger is or is not successful is not important. The effects and the symptoms are measured differently. For corporations and the society, the impact has a long range effect. In order to deliver lasting results, executives need to understand these issues when dealing with the human capital and the cultural differences in a merger or acquisition. Bridging the cultural gap between the two entities is the key for a successful strategic integration at a practical level (Lee, 2003). Integration managers must create the most appropriate organizational conditions to overcome cultural differences.

The sale of a company exposes employees on both sides to an unclear situation, which includes uncertainty about their jobs, loss of security, and worry about geographic or job transfers. Many of the physiological effects displayed by employees of merging firms are well documented: irritation, headaches, insomnia, high blood pressure, and increase cardiovascular risk (Davidson, 1995). These are symptomatic of the

pressures that occur in the general business environment but are amplified in a merger process. Physiological effects may result in greater drug and alcohol use, increased levels of sick leave and higher medical insurance expense and increased accident rates (Galpin, 1999). In general, any physiological disorders afflicting employees prior to a merger will only be made worse by the stress of the merger. Many psychological impacts that result from disruptions in interpersonal relationships can lead to stress, and depression, and may erode physical health over time (Sirois and Burg, 2003).

In an interview, a senior manager at Cascade Communications, a telecom-systems company said:

> **"The company culture changed immediately from open and collaborative to a military style environment. Yes, they offered us a lot of stock options, but the tone clearly changed. The founders and other senior leaders left right after the merger or shortly after, and new managers were brought in from the new owners. They wanted to make this deal work financially. I was based in Massachusetts but was transferred to the west-coast. I resigned a year later and left a lot of money on the table."**

Other less familiar psychological symptoms, include confusion and instability, lower self-confidence and marital/family relationships become increasingly visible in a large segment of a merged workforce (Galpin, 1999). Corporate managers must be sensitive to these problems and be adequately prepared for them prior to the merger. The loss of talent, energy and productivity is always a possibility.

The effects on individuals can have a negative impact on corporations and society. These long-term implications have received little attention or careful analysis because the increased intensity of mergers and acquisitions has come so recently. Galpin's (1999) study of the human element in mergers and acquisitions presents several major findings.

Corporations in America and Europe are well aware of the financial and technological effects of mergers and acquisitions, but know little about the long-term consequences for their human resources. Many corporations appear too optimistic about their ability to merge organizations into one effective streamlined entity without suffering serious personnel problems. The amount of time, energy and experience needed to successfully merge two sophisticated organizations, accompanied by the resultant clash of cultures when attempting to work together toward one end is often underestimated. This corporate failure to consider and plan for the long-term consequences can result in financial problems, loss of employee loyalty, lowered employee morale, widespread turnover and reduced productivity (Galpin, 1999).

One long-term effect of mergers and acquisitions that is not mentioned often is the financial impact on the merged companies. Acquirers are often too optimistic about the financial outcomes of their deals. The reality is that the majority of acquisitions are financial disappointments (Weaver Smith, 2000). There may also be a struggle over resources in the combined entity and particular parties may be forced to divest part of the company (Aiello, 2001). In 2006, after a bidding war with Johnson & Johnson, Boston Scientific acquired Guidant Corporation for almost $27 billion dollars. The culture of the

two organizations was not a main consideration at the time, only the potential financial gain was considered. However, the earnings proved to be a bitter disappointment. The market capitalization of the now combined entity is about half what it was for Boston Scientific prior to the merger.

A consequence of many mergers is a loss of loyalty from employees who view themselves as the "losers" in the merger process. Such employees can range from a secretary, who resents a physical transfer, to a senior vice president, who has been demoted or laterally transferred to a less important job. Each may have their own personal grievance that may effect their actions for years to come. They may even "retire on the job" if they believe that they have been with the company for too many years to easily change corporations. The "golden handcuffs" of accrued benefits might results in the retention of employees, who are no longer making a positive contribution (Aiello, 2001).

One of the key dilemmas in any merger is how to avoid the exodus of key employees at all levels. How to retain the most talented, while reducing the "dead wood" found in any major corporation is a challenge (Price, 1996). Acquiring corporations often find that the employees they most want to retain are the first to leave. An increase in the turnover rate of productive employees is one of the greatest prices paid in acquisitions. This is particularly true of the acquired firm. Research estimates that between 50 and 75 percent of executives in merged firms plan to leave the new organization within two to three years (Pritchett, 1996). Another problem arises when the parent company feels

compelled to reduce work force in order to streamline or downsize its operations. This force reduction almost inevitably leads to a series of wrongful termination lawsuits. Executives not only become distracted by the merger of new operations, methods, standards and employees, but also by the legal preparations needed to defend the company's actions. Many executives described themselves as "extremely stretched" during a merger (Pritchett, 1996). A former NetOptix board member said to me when referring to the Corning – NetOptix deal:

"You better not screw this acquisition up".

Mergers and Acquisitions can also have a significant negative impact on employee morale and subsequent a loss of creativity. This can cripple a corporation that is competing within a rapidly changing industry, (e.g., telecommunications, internet companies in the late 1990's, and e-commerce). Moreover, employees often start talking to their friends and neighbors negatively about their company. They discourage others from joining the firm. Unfortunately, senior executives are often too involved with the merger themselves to notice the morale problems. Moreover, the motivation of the senior management may itself become a significant problem. Managers with a significant equity ownership in the acquired company rarely want to fight for the best possible solution; they often simply go along with any solution provided by the new owners (Aiello, 2001).

Probably the most common long-term consequences is the productivity losses that stem from the blending of new systems and standards (Aiello, 2001). Almost every

control system in the acquired corporation needs to be revised to meet the standards of the parent company. The control systems include those covering accounting, finance, HR, IT, and environmental health and safety. The mere introduction of new financial and purchasing policies can negatively impact a factory.

As a former founder and CEO of a company that was also acquired by Corning noted:

> **"They (Corning) have all these great policies, procedures and software and they want me to use it all, but they don't provide any resources. I am not against it, most of it is pretty good and much better than what we have. However, now I have many of my formerly creative people working on the implementation of all of this and not doing the work they are supposed to do. Keep in mind that Corning has over 40,000 employees and we are only 50 people here."**

Culture clashes between the merging companies as noted can present significant problems. These differences range from dress codes, to company cars, to leadership style and to reporting structure. At NetOptix, senior managers wore suits and ties, the CEO and CFO at NetOptix had company cars and marked parking spaces. In Corning these practices were non-existent. The clash of cultures is so common that the public seems to accept it with nonchalance. The announcement that General Motors was buying out Ross Perot's stake in GM and Electronic Data Systems for 700 million dollars because the dissonance of personalities and cultures had become intolerable" was accepted as

business – as – usual (Aiello, 2001). When there are such broad cultural differences between corporations, it affects major decisions and communication between the two companies becomes difficult. While the "culture merger process" is difficult to manage or define, it is crucial.

My reading and observations suggest that there are terribly flawed communications systems in almost every instance of poorly merged enterprises. If publicly traded companies are involved (e.g., the NetOptix / Corning), the Securities and Exchange Commission (SEC) severely restricts the types of information that can be shared internally or externally prior to a completed merger. With the recent insider trading scandals, one can assume that the SEC and corporate executives will clamp down even further on the exchange of important information during the pre-merger stage. Employees will know that something is happening, but accurate information will be unavailable to them. In some instances, senior executives have been accused of lying to their employees about the pending merger. In one case, a senior officer of the firm denied that a merger was even under consideration as little as two days prior to formally announcing the merger to the same employees (Price, 1996). Circumstances such as these breed destructive rumors and can stampede normally well-balanced employees into poorly considered actions. Many managers perhaps find themselves learning more about their employing corporation from reading the daily business section of the newspaper than from their own superiors.

The prelude to a merger is a particularly troublesome time for any corporation (Stanley, 1998). Accurate information is most often held by a small group of senior

officers and their outside consultants. They guard against any "leaks" that might jeopardize the proposed merger. Consequently, executives without a "need to know" are usually excluded from having the very information they need to effectively plan for, and be able to communicate to their employees. These excluded executives find themselves alienated, frustrated, and defensive when employees bombard them with questions about the future (Cartwright, 1996).

One of my interviewees stated:

> **"We knew that something was going on. The rumors were widespread ... overall, it was like, no news is bad news."**

Human resource problems are at the heart of M&A failures. Why are these executives so often left out of the deal making? Human resources managers are often considered "softball players" in the "hardball game" of mergers and acquisitions. The feeling experienced by those I interviewed is that HR-personnel must clean up the mess after the starting lineup (e.g., CEO and CFO) has nailed down the victory (Aiello, 2001). As long as human resources professionals are viewed by many senior executives as not being able to play hardball in the corporate big leagues, this situation is unlikely to change.

Executives who had the appropriate training and experience in handling the human resources problems that result from the merger process are rare (Stanley, 1998). Often, important human resource decisions are left to senior non-human resources managers without applying any corporate standards, policies and procedures to those decisions. These decisions can include layoffs, relocations, structural changes, and

conflict management procedures.

Mergers and acquisitions are the ultimate human resources challenge for any executive. However, it is also true that many HR professionals are not qualified to lead the process of integrating two companies since they have no experience in doing so. Delivering results requires a new type of integration manager with life experience in large-scale organizational changes and organizational development in diverse corporations.

The Role of the Founders

Founders have a unique role in their company from the beginning of the venture until their exit and even beyond. Entrepreneurs take risks, often funding the company until the first significant funding is located. The outcome is always uncertain whether it is one's first or fifth entrepreneurial endeavor. But, still, many people like to participate when technology is turned into products. To build a company is exciting and satisfying. Yet, at the same time, it is also frustrating and exhausting.

I have started three companies and helped to start and finance many more. I have also talked to hundreds of founders over the years. Many had successful exits. Some had multiple successful exits. Depending on the size of the company and the stage of the venture, the founders have a unique role. They are not only leading the company, they are the company's face to customers, to the financial markets, to their employees, and they usually have a large amount of equity in the firm.

As important and clear the roles of the founders are while running the company, their role after an acquisition is often muddy and their authority is often compromised. This is further increased by miscommunication or simply by dishonesty on the part of the acquiring firm. The acquirer often uses the phrase "We'll leave you alone", while knowing that this rarely will not happen. Many things will be changed.

Cisco Systems, for example is direct in saying:

> **"When we acquire a company, we don't tell them, "We'll leave you alone". We say, "We'll change everything" (O'Reilly, 1998).**

But often, key management decisions take too long and power struggles and tensions between units set in. Experienced companies such as Cisco have learned that to make the acquisition successful, they have to tell the employees "up front" what they are going to do. Trust is everything. Cisco believes that "you have to tell employees early so you don't betray their trust later" (O'Reilly, 1998).

The founders on the other side are also sometimes guilt of violating trust. They may not be specific about their own intentions, short term and long term, when communicating with employees. During my negotiations with Corning, no time was spent on what role I would play in the new company until the last final moments of the negotiations.

As an example of one view on the founder's role after an acquisition, Darmesh Shah, an entrepreneur who successfully sold his software company pointed out in an Interview the importance of being "straight and honest" in communication.

"Clearly the plan was that the founders did not want to stay at all. In my opinion it is disruptive for the entire integration process. We didn't even try to stay on for three months or so. The acquirer wanted to have one of their senior executives as the new CEO. This was made clear to everybody. This made the integration relatively easy. The employees liked to be part of a bigger company. They felt more secure. It is better to make a clear cut."

In my interviews, I asked founders the question about their motivation to stay after the deal was done and integration underway. Many founders, even after multiple rounds of financing, are large stake holders in the new company and have increased their wealth significantly. Many become financially independent as a result of the deal. The question then is how motivated they are after a deal if they know that they can walk away at any time without financial worries. The responses of those I interviewed varied considerable according to the situation they described. Overall, it seems that in most merger negotiations little time was spent discussing the future role of founders or other key managers.

One founder of a high-tech company stated:

"The only thing that was clear to me was that I'll stay in the company which became a wholly owned subsidiary of a large corporation and now I am reporting to a division vice-president. Over time, the advice and recommendations from my new boss and headquarters have increased significantly, although we were told that they will leave us alone. In the beginning, I did fight the most of the new procedures and policies, because I

didn't think that they make sense for us. I am not anymore, whatever they want they'll get, whether if makes sense or not."

Those on both sides of the negotiation table should start before the acquisition decision with a careful scrutiny of the management styles, organizational structures, and cultures of the firms involved. Key personnel at the target company are concerned about their own futures. These topics need to be candidly communicated early in the acquisition process. Companies willing to properly prepare themselves by following the recommendations described in this thesis will increase their chances to create strong, profitable and long lasting organizations as a result of the acquisition.

CHAPTER 6 – THE DELTA MODEL FOR CULTURAL AND HUMAN DUE-DILIGENCE

Companies pay premium prices to acquire other companies but then struggle with the integration of the "new family member" and rarely get the full benefit that the combined entity potentially could offer. I have covered a variety of reasons which explain this phenomena in previous chapters. However, I believe if done right, acquisitions could well provide much more than just a new technology or product. They can revitalize the core elements of an organizations and form something that is altogether new. Acquisitions can introduce new values, beliefs, skills, and knowledge into an exhausted organization that, when combined in the right way, can lead to a new set of practices (Vermeulen, 2005).

A manager with Snapple (after the acquisition of Nantucket Nectars) put it this way:

> **"We have learned from Nantucket Nectars' expertise in guerilla marketing activities. They reacquainted us with how to execute on the street level." (Vermeulen, 2005)**

A manager at Pfizer, after the acquisition of Warner-Lambert/Parke-Davis, stated:

> **"Before we were used to having so much money that we didn't think about efficient use of resources. There is now a more open culture, a faster decision making process. As a result of this acquisition, Pfizer became a looser and more nimble organization." (Vermeulen, 2005)**

The resources in a company can be classified into three broad categories: "Tangible Assets, Intangible Assets and Organizational Capabilities" (Hax, 2006). Organizational capabilities are not factor inputs like tangible and intangible assets. They are complex combinations of assets, people, and processes that organizations use to transform inputs into outputs. The list of organizational capabilities includes a set of abilities describing efficiency and effectiveness: low cost structure, "lean" manufacturing, high quality production, and fast product development (Collins and Montgomery, 1995). The challenge for every company involved in an acquisition is to select and follow a strategy that best exploits the target's resources and capabilities relative to other opportunities. The acquirer, typically, is well equipped with tools and models to conduct a thorough technical and financial due-diligence. However, no efficient framework exists for reviewing a company's organizational capabilities, conducting a human (or cultural) due-diligence and using these results for the integration process.

The Delta-Model developed by Hax and Wilde (1988) is an innovative approach to business strategy development and strategy management. I apply this model in this chapter to create a framework for a cultural and human due-diligence process that can be used in the different phases of mergers and acquisitions. The model provides a guideline for the activities that can be taken before and after a deal, where the objective is to achieve a sustainable competitive advantage by formulating and implementing a human due diligence and integration process.

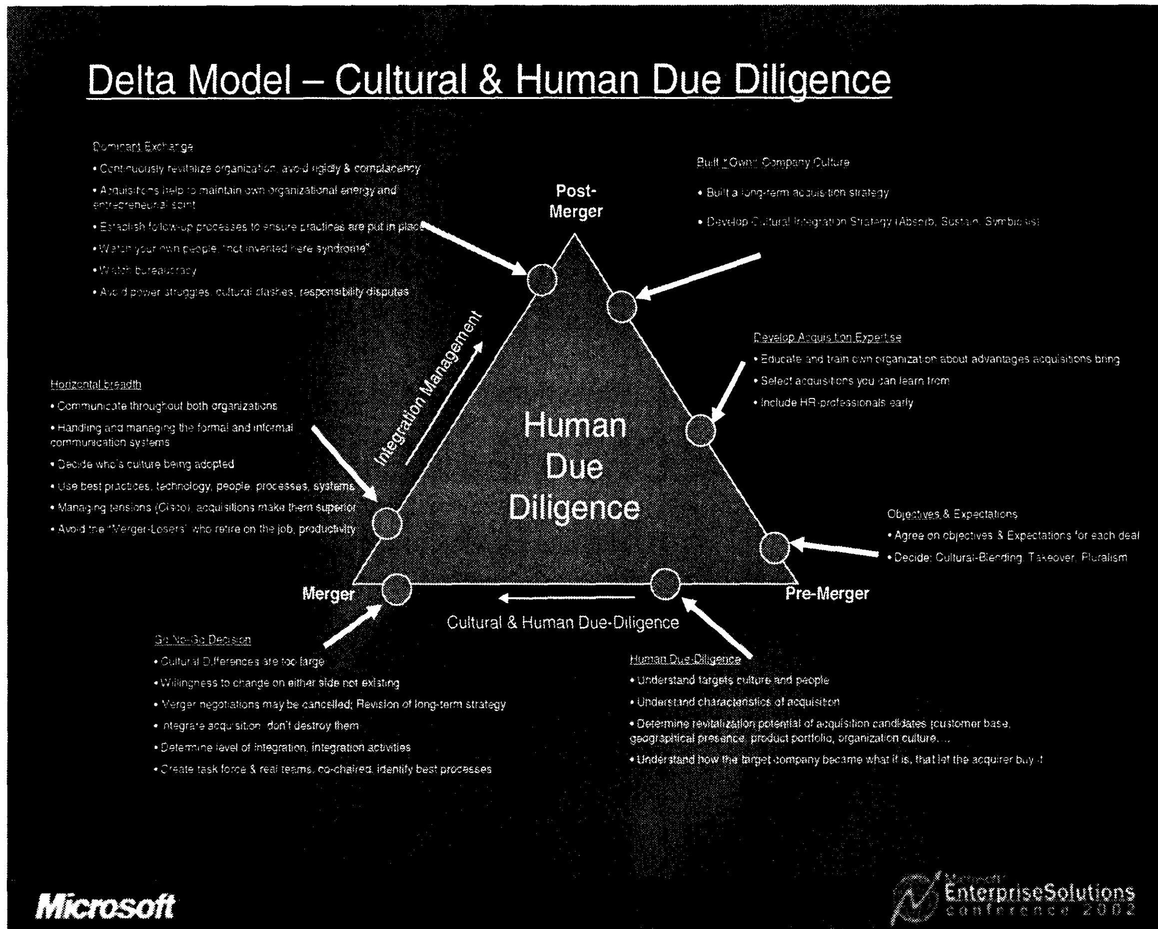


Figure 2: Delta Model for Cultural and Human Due-Diligence (see also Appendix B for an enlarged description)

Depending on the situation and the level of experience on the acquirers side and the different nature of a deal, companies will have different starting points in the Delta model for human due-diligence and the integration process. Cisco Systems, for example, with over 80 acquisitions in the last 5 years has built an acquisition friendly culture within the

company and has developed a wealth of experience across all levels of the firm. At Boston Scientific, a well developed acquisition and integration strategy is necessary to fuel the growth of the company. With relatively small in-house research and development resources, the company needs to acquire technology and talent to develop new businesses or grow existing ones. For their acquisition of small companies and investments in start-up companies, Boston Scientific has developed a screening process which allows the company to get an early entrance in new technology industries. Corning Inc., on the other side, invests heavily in its own technology development and has a strong in-house research and development capability. Although Corning was the inventor of the optical fiber in the early 1970's, the company almost missed the telecom and photonics boom in the 1990's. In order to catch up with their competitors, they acquired technology and scarce human capital. As I illustrated with its NetOptix acquisition, the company did not have a long history of making acquisitions and struggled with the integration of those deals they did make. Little, if any, human or cultural investigation was done prior to their deals. Deals at Corning were initiated by senior managers who, by and large, followed ad hoc procedures (although open and welcome) when integrating the new company into their organization. Integration was done in operating units and a tense atmosphere often developed.

These examples demonstrate that there are different entry points when using the Delta model. For Corning, the ideal entry would be before pre-merger activity and would attempt to create a culture that is open to acquisitions, to develop the needed acquisition expertise, and to set appropriate objectives and expectations for each acquisition. In a

company like Cisco, with many deals done and executed, the focus would be centered around the merger and post-merger phases. Learning from successful and unsuccessful acquisitions is important and is a valuable asset for future transactions. The Delta model can be seen then as a circle for a process in which "before the deal is after the deal." The components of the model should be tailored to the individual needs of the involved company and be adjusted frequently. I now suggest how one might use the Delta Model at each stage of the acquisition and merger process.

Pre Pre-Merger Phase:

First, companies should develop a long range strategy and a create a culture open to acquisitions such that employees view them as positive additions needed for the company's future development and growth. Firms should also draft a cultural integration strategy and make it a central part of the long range plan. They must, at the same time, educate employees about the advantages and challenges of acquisitions. The firm's managers must also decide for each individual deal what type of integration strategy will be used: Absorb, Sustain, or Symbiosis.

It is important that an organization planning to do acquisitions, develop its own expertise. Employees at all levels may need a dedicated training program to develop acquisition skills. Human resource professionals should be given a key role to play in all phases of the acquisition process and must be included from the outset of an acquisition process. Senior managers need also to set objectives and expectations and communicate

these clearly within their organization as early as possible. Managers must also decide on the depth of the integration before signing the deal: Cultural Blending, Takeover, or Pluralism.

Pre-Merger Phase to Merger Phase

Companies should make human due-diligence a part of their pre-selection process. Certainly, technological, financial, or geographical reasons will dominate in this stage of the deal finding. However, it is necessary to also understand the target's culture and employees. In this stage, the acquirer should determine the revitalization potential of the acquisition candidates. How large is their customer base? What is their geographical presence? Their product portfolio? And their organization culture?

It is important to understand how the target company evolved and what interested the acquirer in the target. The formal human due-diligence process should be started as part of the official and required due-diligence tasks. The findings of the human (and cultural) due-diligence should be considered as a "go or no-go" decision. Merger negotiations should be cancelled if the cultural differences are too large and a willingness to change (on either side) does not exist. This may perhaps lead to another search for an appropriate target or a revision of the long-term strategy.

The acquirer must determine the level of desired integration. A task force should be appointed to identify the best integration processes and decide how they will be

implemented. The organization should be informed as soon as possible. The goal is to integrate not destroy the acquisition.

Merger-Phase to Post-Merger Phase

After the papers are signed and the ink is dry, the integration process itself can begin. Communicating with members of both organizations and managing the formal and informal communication systems and networks are the most important tasks to be accomplished during the integration process. Former CitiCorp Co-Chairman John Reed said:

> **"You cannot simply call a meeting of all 3600 employees of the private bank for 4pm one day, announce that the culture will change effective immediately and expect that you get the results you want".**

There are several efficient ways of doing this: company letters, company intranets, emails, town house meetings, presentations in large groups and in small meetings. The more communications, the better. The two companies must decide which culture or what parts of the culture will be adopted (by whom). Companies must try to use the best practices, technology, people, processes, and systems that both sides have to offer. Both companies must try to manage the tensions that will arise and avoid creating "Merger-Losers" who will retire on the job and have a negative impact on the moral and productivity in the newly formed entity. If efficiently managed, acquisitions can

revitalize the organization and help it to avoid rigidity and complacency. Acquisitions can help maintain organizational energy and the entrepreneurial spirit. Follow-up processes must be put in place to ensure that newly implemented practices are working. The acquirer should keep an eye on its own people to avoid bureaucratization and any reminiscent of the "not invented here" syndrome. Open communication and making tough decisions early will help avoid power struggles, cultural clashes and responsibility disputes.

After the Post-Merger Phase

The results of the successful or unsuccessful integration of the acquired company must be evaluated and the processes used judged as successful or unsuccessful. If it is the later, changes must be implemented and used on the next deal. This last step is often not part of the plan. The time between acquisitions can be long (with Cisco as an exception). This time should be used effectively to study past deals and for training and education within the organization.

CHAPTER 7 - CONCLUSION

One hopes that managers in merging companies are becoming more aware of their responsibilities to new and old employees. This change in emphasis has perhaps resulted from a number of major corporations finding themselves faced with the problems described in this thesis. I think companies are starting to understand that merger activities cannot be dominated solely by lawyers and financial analysts. Lawyers and financiers make the deal, but line managers, at all levels, are the ones who must make the merged firms work (Cartwright, 1996). Companies must realize that it is vitally important to involve these managers in the planning processes associated with any major organizational change. And mergers and acquisitions are certainly major organizational changes.

Many factors influence the effective integration and management of acquisitions. These factors are likely to change over time and will become more or less important. The Delta triangle suggests that "after the acquisition is before the acquisition". This triangle represents a circle with the different components constantly moving. The entry point will vary for different companies, depending on their growth targets and experience with mergers and acquisitions.

For newcomers in the acquisition scene, it starts with the creation of a strategy which makes acquisitions an essential part of the company's long range plan. Acquisitions can make the combined company stronger. Second, it is important to built

an acquisition friendly atmosphere which allows the combined entities to use the best parts of both companies in the merged firm. This will help to retain the key talent. Third, experienced human resource personnel must be included during the entire acquisition process starting with the pre-merger phase. Despite best-laid plans, however, conflicts will occur in unexpected places and times during the merger process (Stanley, 1998). In order to manage such problems, I recommend that the human resources staff put together "action teams" of two or three professionals with special skills to assist line managers. If the problems involve the selection of employees to be retained in the new enterprise, then staff skilled in evaluation and compensation must be assigned to the line manager and act as internal consultants. (Price, 1997). The early work done by the contingency planning teams would provide senior human resource executives with a pool of internal and external resources to call upon in such situations.

Progressive corporations such as Cisco, Boston Scientific, and many bio-Tech companies have realized that a merger is a sham without the positive support of the newly acquired human resources. Buildings, equipment, and patents can be claimed and controlled but the creative energy and productive force carried by the employees that comprise the acquired firm have to be earned anew, by the new parent corporation. As a manager responsible for the integration of two companies in the oil and gas industry noted:

> **"The integration process went very well and the acquisition was viewed as a success. Both sides worked together with the objective to keep the best parts of the two companies for the new combined enterprise. I think we did a good**

job in the pre-merger phase. We identified the key people and included them in the process early on. We decided to inform the employees of both organizations frequently and as much as we possible could. The majority of the organizational changes were done within six months. In locations where we had the most overlap, we combined those into one site within 3 months. Managers from both sides were responsible for the operating divisions on for functional tasks. The employees seem to like the new environment, almost nobody left. The attrition rate was less than 2%." (Interview with Mary-Ann Kuo, Precision Drilling Company, 2007)

The knowledge of the cultural differences, their potential impact on operating levels, and the company's long term objectives allow for the design of a master integration plan (see, as noted, the Delta Model, Appendix B for further details). The acquirer must acknowledge that the most acquisitions are infected with problems. The goal is to uncover as many issues as possible during the due diligence process. And, based on these results, make the decision to do (or kill) the deal. Cisco, for example, has made the decision to not go ahead with the acquisition many times if there was no "cultural fit". Managers on both sides are aware of the fact that a high percentage of acquisitions fail. However, the buying side still focuses mostly on technology and financial issues. But, if one acquires a company it acquires people. Thus, the highest priority must be to retain those people. If this cannot be accomplished, the investment decision will be a poor one.

My recommendation is to integrate as quickly as possible and start with training

and orientation sessions immediately. It makes no sense to delay tough decisions. Convene a large group of key leaders from both sides to design the new entity and build "real" integration teams. The organization of the acquirer needs to be prepared in order to integrate new members efficiently. For first timers, this can be a challenging task because of the lack of experience. But, even companies with a long history of acquisitions need to constantly update their strategy and expertise. Acquirers should create a welcoming culture and must make sure that the new employees have offices and are up on the various networks soon after their arrival.

At all times during the pre- and post-merger phases, the goals and values must be communicated clearly and frequently. The formal and informal channels must both be used to communicate to employees. There should be no "hidden agendas". Integration must be executed on two levels, the structural and the cultural. Change is not a bad thing in the long run, but employees must recognize that it may be painful in the beginning. If possible, all employees should be encouraged to participate. I recommend conducting a "cultural survey" to get to the "pulse" of the organization and try to get the "buy-in" of the employees. What do they think about this deal? What do they see as the critical problems to be overcome? A joint team of managers from both sides should review the data and communicate the results. Corporate management must acknowledge that not everybody will stay and that not everyone is a good fit in the new organization. However, the primary objective is to retain key people and their intellectual capital. The integration process must be designed to accomplish this goal

The motivation for mergers and acquisitions is to grow the company. But, M&A's can also put the company at risk and destroy shareholder value. This thesis challenges the traditional ways of integration management.

APPENDICES

APPENDIX A - Venture-Backed Liquidity Events; 2001-2007; YTD

APPENDIX B – The Delta Model for Human Due-Diligence

APPENDIX C - Interview Summary; Doug Adams; SOLX/Occulogix

APPENDIX D - Interview Summary; Deborah Pine; PreVision Marketing LLC

APPENDIX E - Interview Summary; Prabhu Kavi; Cascade/Ascent

APPENDIX F - Interview Summary; Darmesh Shah; Pyramid

APPENDIX G - Interview Summary; Mary Ann Kuo; Precision Drilling Co.

APPENDIX H - Interview Summary; Peter Norris; NZ-Technologies

APPENDIX I - Interview Summary; Cliff Robinson; Boston University

APPENDIX J - Interview Summary; Dominique Hurley; Dendrite Inc.

APPENDIX K - Interview Summary; Jean-Louis Malinge, formerly Corning Inc.

APPENDIX L - Interview Summary; Henry Kay, formerly Boston Scientific Co.

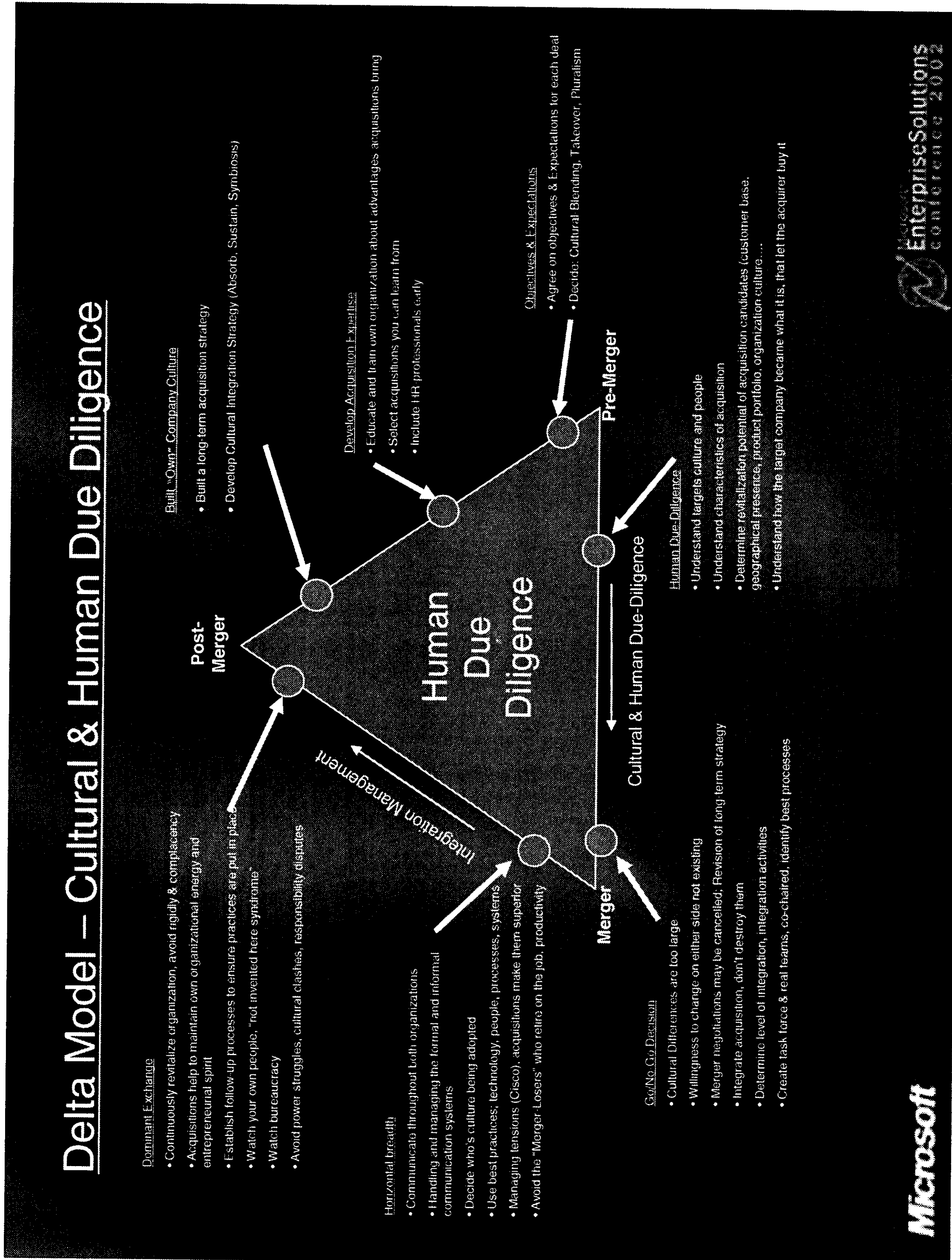
APPENDIX A

Venture-Backed Liquidity Events, 2001-2007 YTD

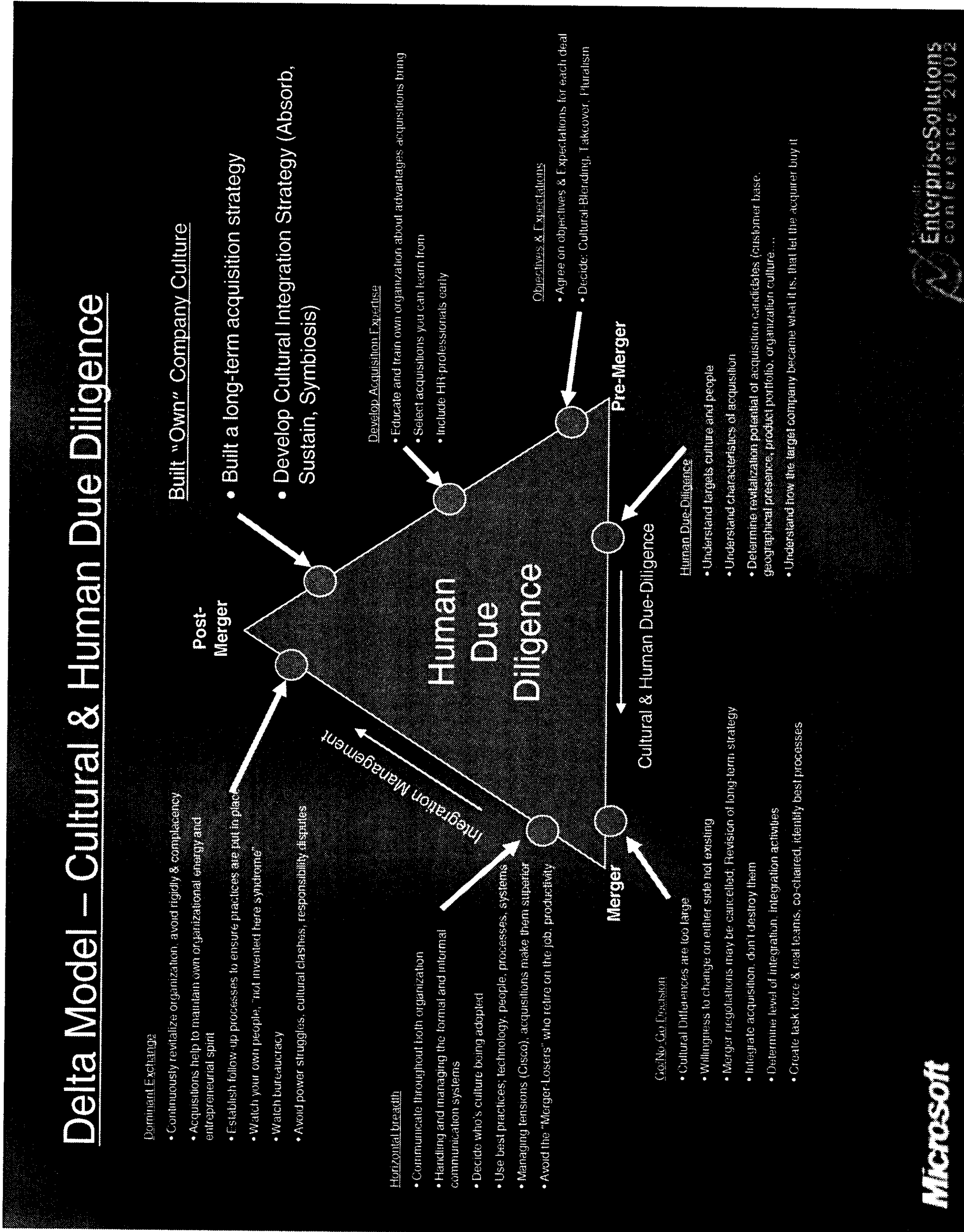
Quarter/Year	Total M&A Deals	M&A Deal w/ Disclosed Value	Total Disclosed M&A Value ($M)	Average M&A Deal Size ($M)	Number of IPO's	Total Offer Amount ($M)	Average IPO Offer Amount ($M)
2001	353	165	16,798.9	101.8	41	3,489.9	85.1
2002	318	152	7,916.4	52.1	22	2,109.1	95.9
2003	291	123	7,726.1	62.8	29	2,022.7	69.8
2004-1	**80**	**45**	**3,921.0**	**87.1**	**13**	**2,721.1**	**209.3**
2004-2	**89**	**48**	**4,514.6**	**94.1**	**29**	**2,077.8**	**71.7**
2004-3	**86**	**47**	**4,142.8**	**88.2**	**24**	**3,225.6**	**134.4**
2004-4	**84**	**46**	**2,862.2**	**62.2**	**27**	**2,990.4**	**110.8**
2004	339	186	15,440.6	83.0	93	11,014.9	118.4
2005-1	**82**	**46**	**4,364.9**	**94.9**	**10**	**720.7**	**72.1**
2005-2	**80**	**36**	**4,791.0**	**133.1**	**10**	**714.1**	**71.4**
2005-3	**98**	**47**	**4,374.8**	**93.1**	**19**	**1,458.1**	**76.7**
2005-4	**87**	**39**	**2,563.7**	**65.7**	**17**	**1,568.1**	**92.2**
2005	347	168	16,094.4	95.8	56	4,461.0	79.7
2006-1	**104**	**48**	**5,384.4**	**112.2**	**10**	**540.8**	**54.1**
2006-2	**92**	**37**	**3.747.6**	**101.2**	**19**	**2,011.0**	**105.8**
2006-3	**87**	**39**	**3,726.3**	**95.6**	**8**	**934.2**	**116.8**

Source: Thompson Financial Securities Services, 2005

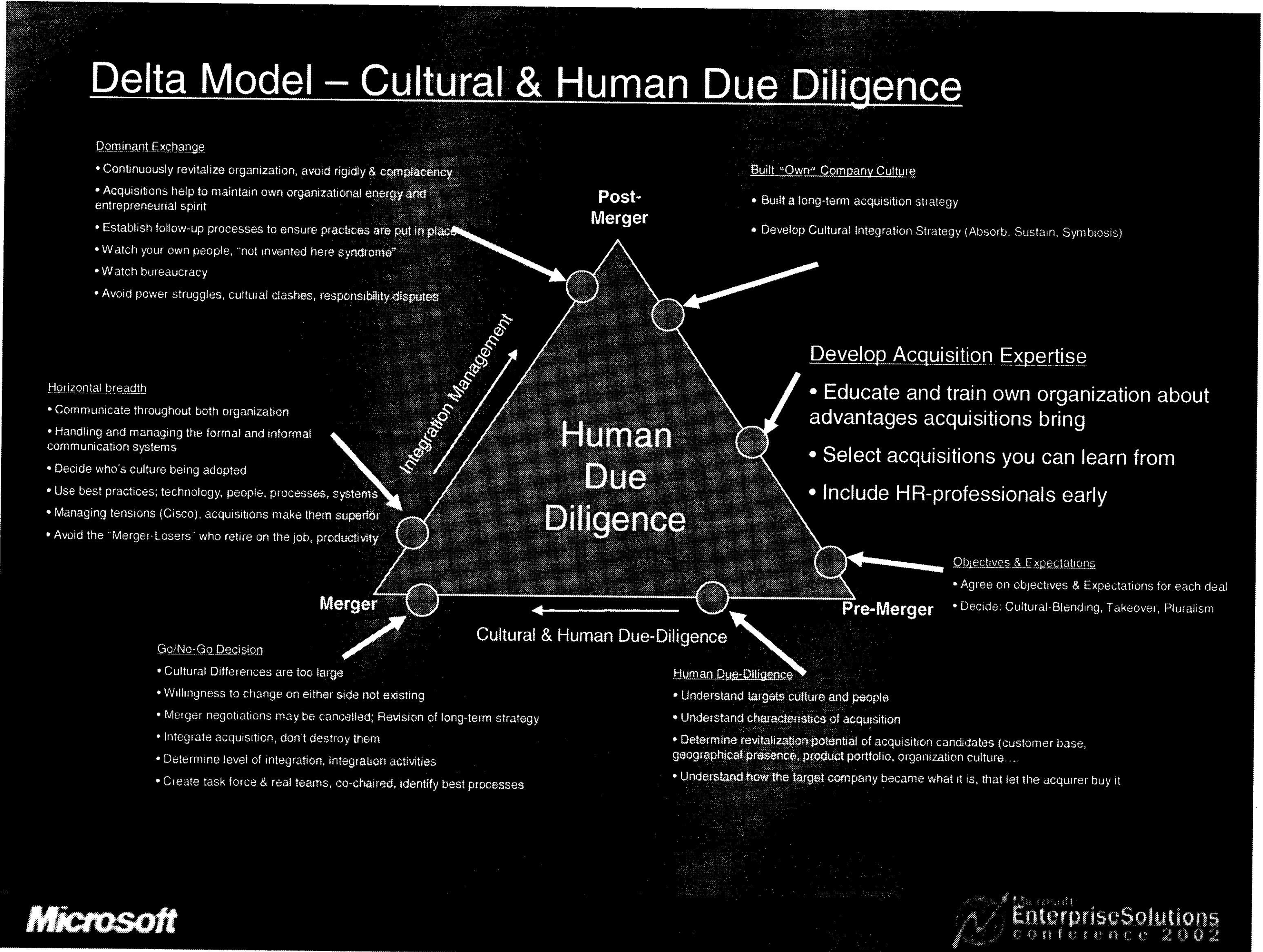
APPENDIX B-1:



APPENDIX B-2:



APPENDIX B-3:



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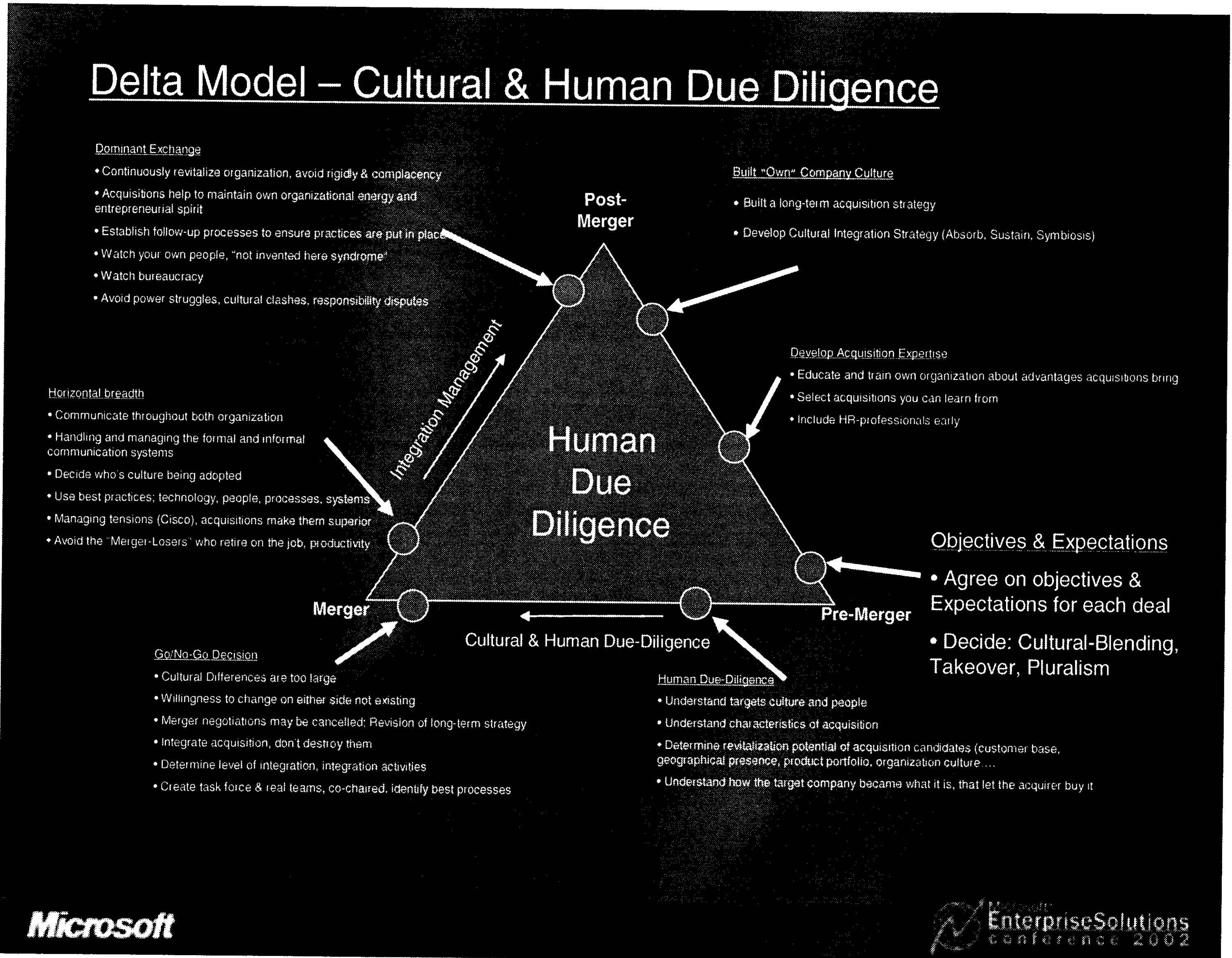

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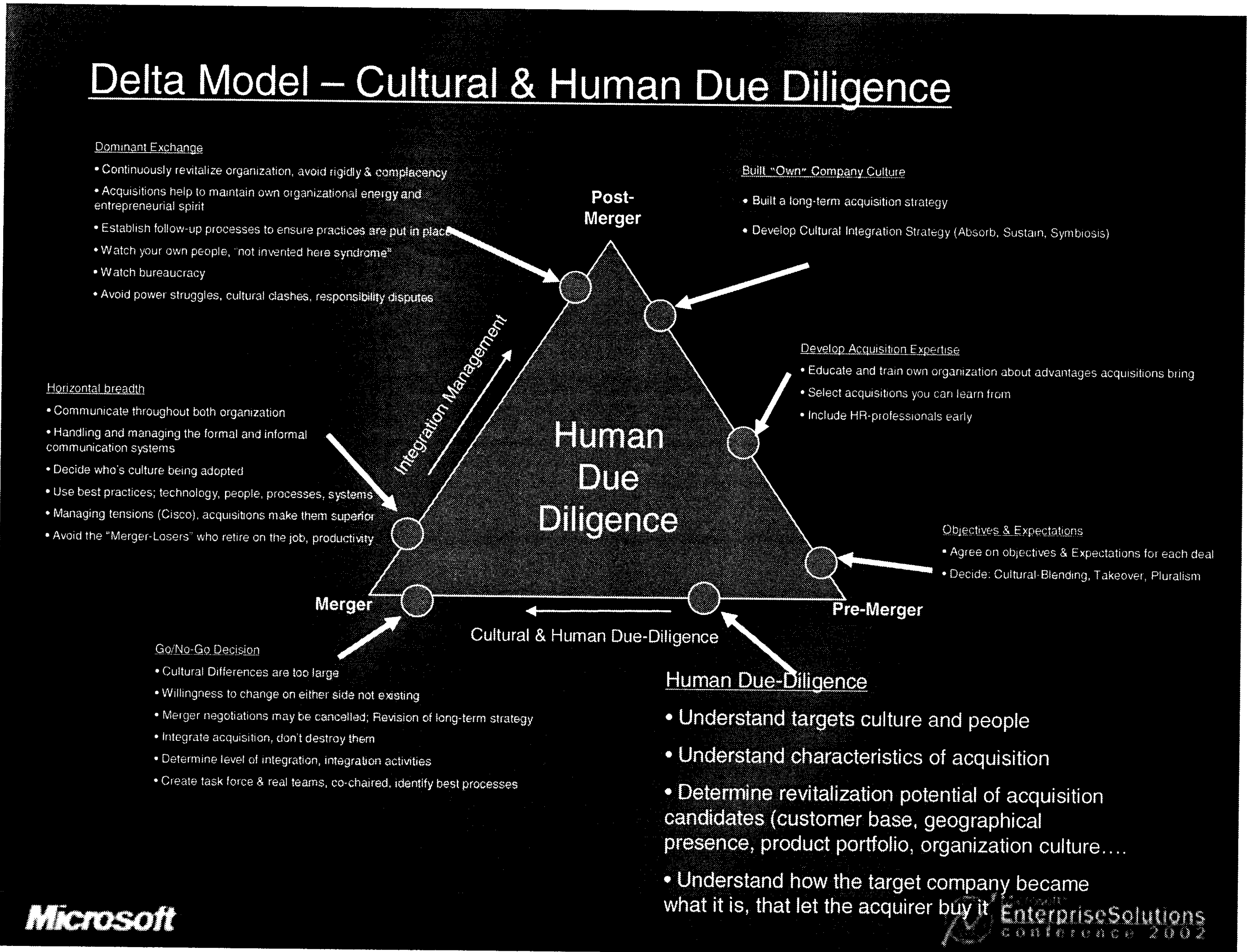

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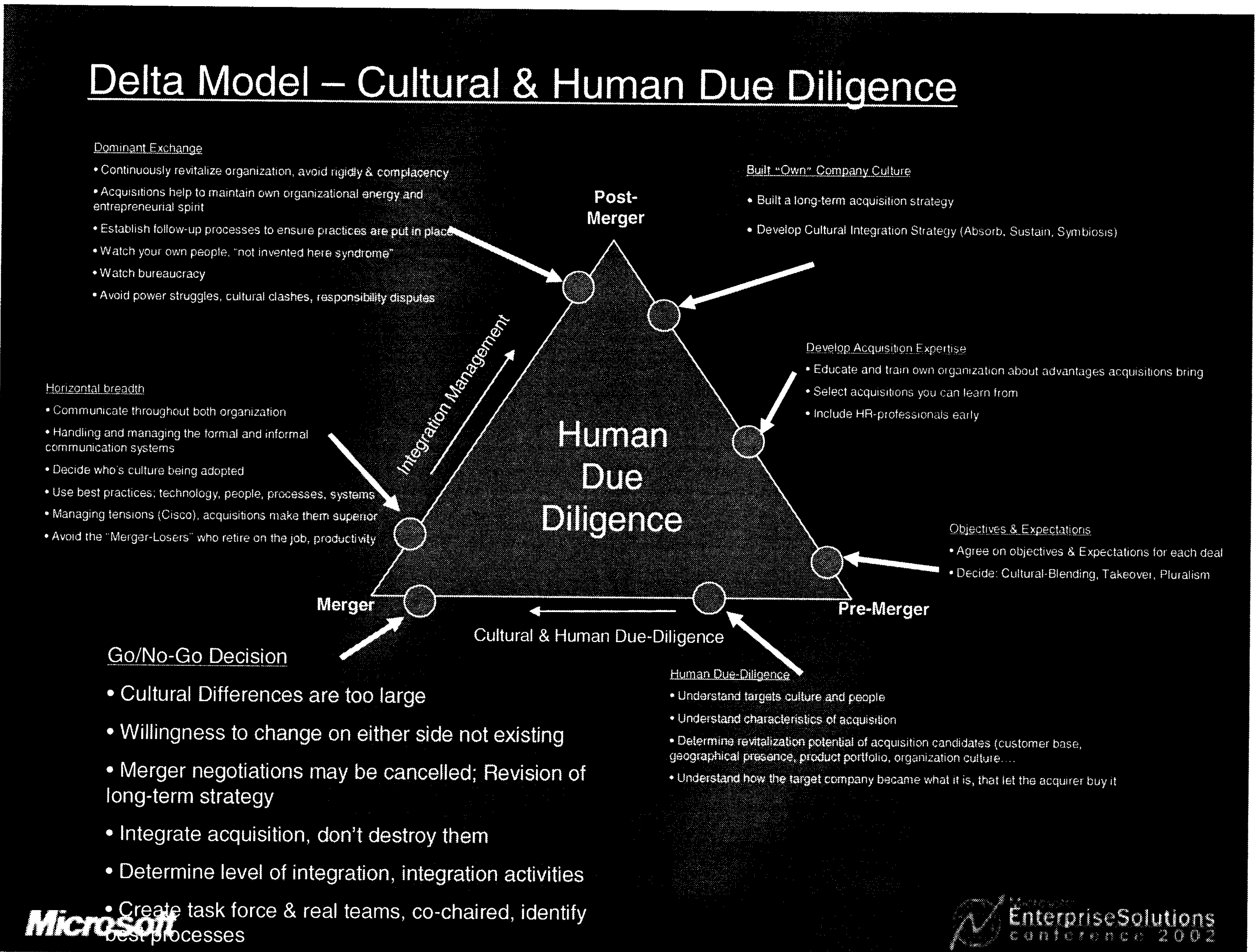

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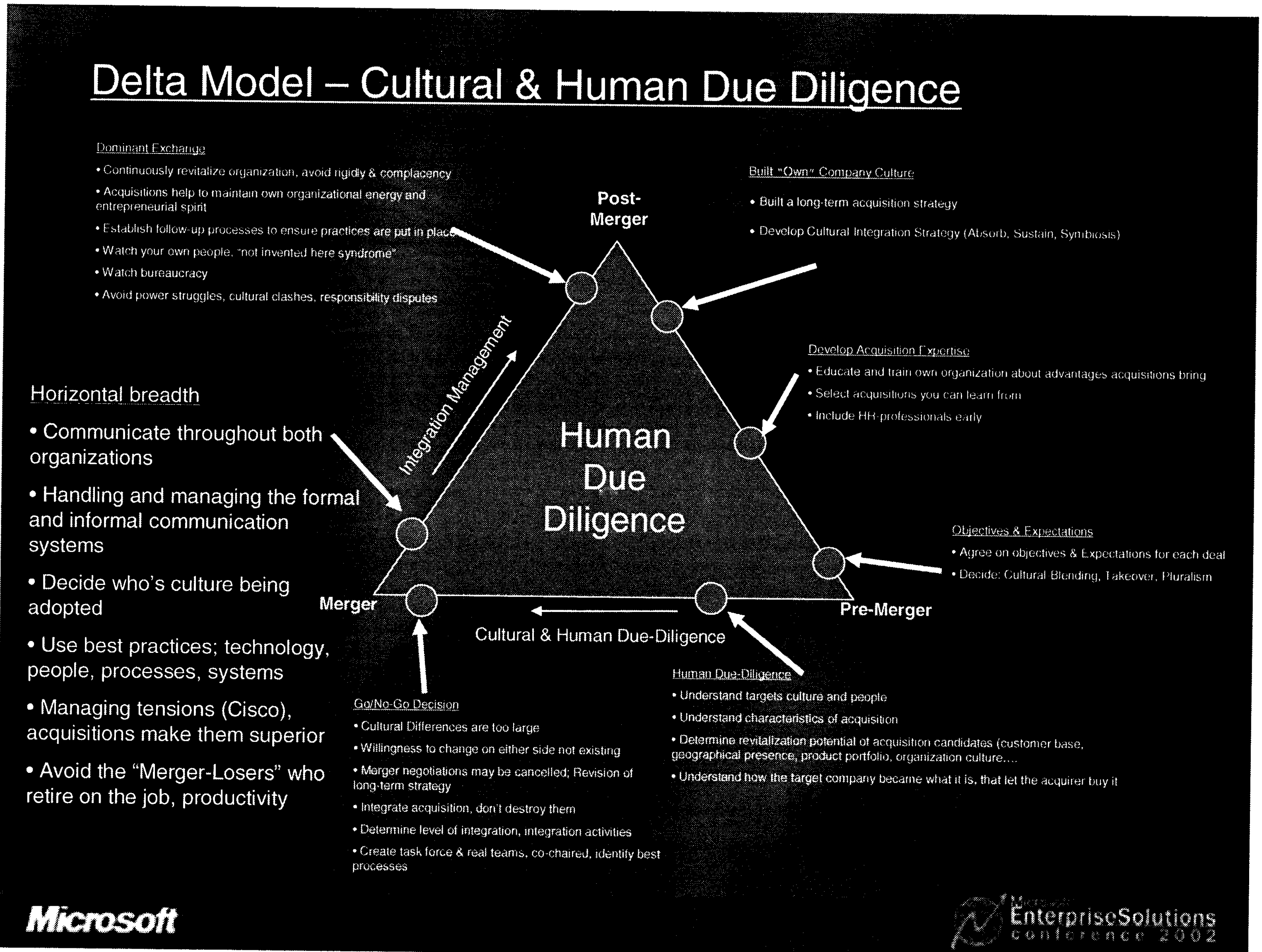

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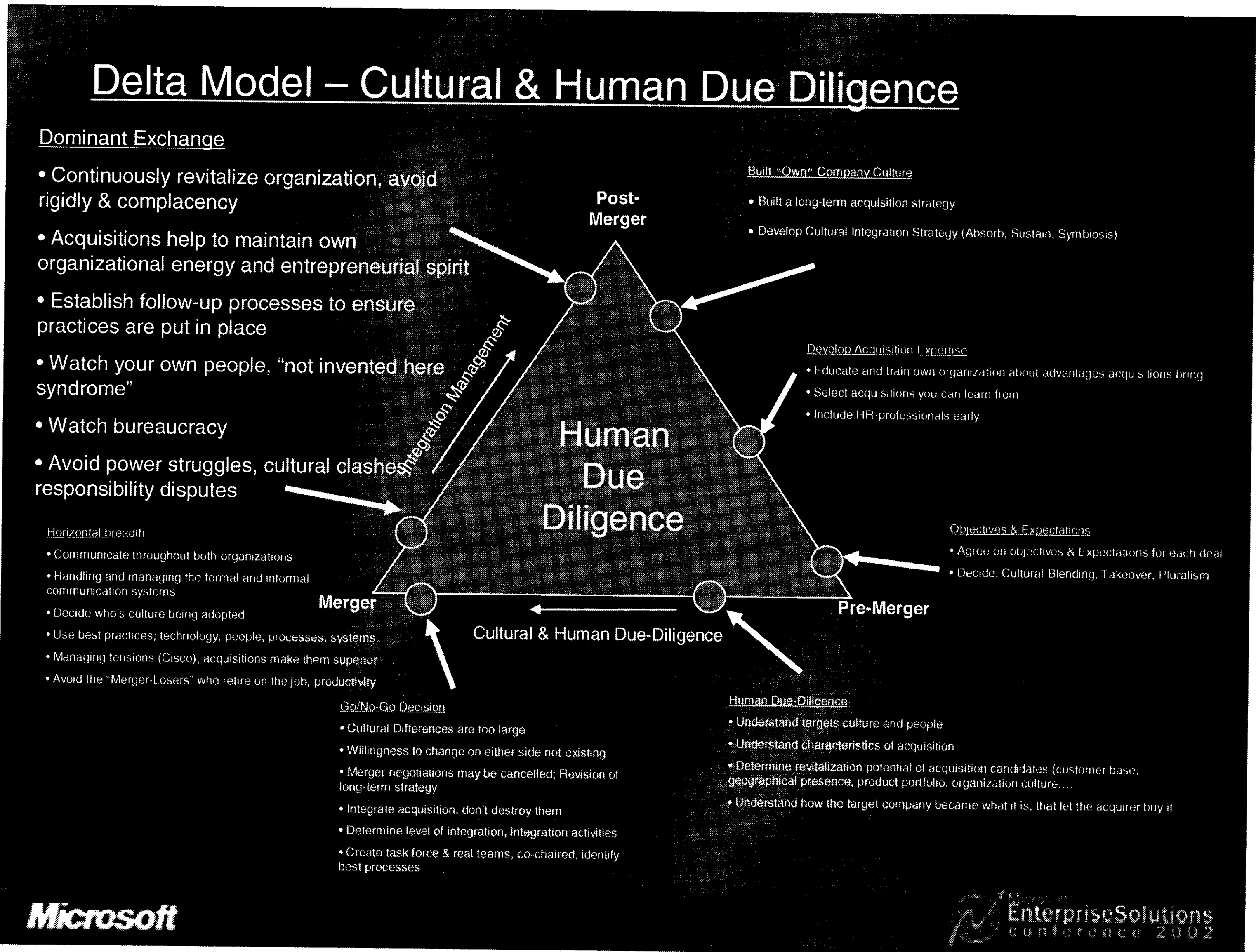

APPENDIX C

Interview Summary; Doug Adams, SOLX/Occulogix

Date of interview: January 2007

Name and position of person: Doug Adams, Founder, CEO & President

Background of Person: Please see below

Company (pre-acquisition): SOLX Corporation, USA

Company (post-acquisition): Occulogix Inc., Canada

Date of acquisition: September 2006

Length of integration process: 3-4 months

Size of transaction: $30 million

Size of acquired company: $0.5 Million / 10 Employees

Size of Acquirer (Revenue/Headcount): $0 / 35 Employees

Mr. Adams is an experienced local entrepreneur in the life science business. He has founded six companies and had successful exits from four of them. Mr. Adams had executive sales and marketing positions in several life science companies before becoming an entrepreneur. His last company, SOLX Corporation, a medical device company was sold for $30 million in September 2006. He started SOLX seven years ago as a one person company, taking a license from an Ophthalmologist in Spain. The company was located in the business incubator at Boston University's Photonics Center using BU engineering resources in exchange for equity for several years.

His motivation to sell the company:

The company was in immediate need of capital after a corporate investor decided not to participate in the next financing round. Mr. Adams pursued several funding options and decided to do an outright sale of SOLX. According to Mr. Adams, money was not a driver to sell the company. He and his shareholders want to build a "legendary" company and they liked the Occulogix strategy building a portfolio of devices to treat age related eye diseases.

His experience with the integration process:

After six month with the new parent, Mr. Adams views the integration as a success and he is satisfied with the outcome. He was actively involved in the integration of the two entities. Not many things have changed, he says with the exception of new logos and a new email system. SOLX has benefited from the change in control as more resources were made available and senior management of the acquirer accepts the new people.

What could they have done differently?

Not too much in this case. Since, both companies are relatively small in size (number of employees), communication between the two entities and locations are not a problem.

APPENDIX D

Interview Summary; Deborah Pine; PreVision LLC

Date of interview: January 2007

Name and position of person: Deborah Pine, Founder, CEO & President

Background of Person: Please see below

Company (pre-acquisition): PreVision Marketing LLC., USA

Company (post-acquisition): Volassis Corp., Canada

Date of acquisition: 1999, closed March 2000

Length of integration process: n/a

Size of transaction: n/a

Size of acquired company: $30 Million / 125 Employees

Size of Acquirer (Revenue/Headcount): $1Billion / 3,000 Employees

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Deborah Pine is an experienced entrepreneur in the high end marketing business. She is Principal and co-founder of PreVision Marketing, a database marketing firm for high end one-to-one advertising. Mrs. Pine and her two partners remained for 2 years after the sale of their company. Mrs. Pine and her two partners started the company about 10 years prior to the acquisition. At the time of the acquisition, the company had 125 employees and revenues of approximately $30 million. Volassis, the acquirer is a publicly traded company with several thousand employees and revenues of approximately $1 billion. Volassis business focus is on mass marketing for large corporations, e.g. coupon inserts.

APPENDIX E

Interview Summary; Prabhu Kavi, Cascade/Ascent

Date of interview: April 2007

Name and position of person: Prabhu Kavi, Product Manager

Background of Person: Please see below

Company (pre-acquisition): Cascade, USA

Company (post-acquisition): Ascent, Canada

Date of acquisition: April 1997

Length of integration process: 2-3 months

Size of transaction: $4 Billion

Size of acquired company: $450 Million / 900 Employees; publicly traded

Size of Acquirer (Revenue/Headcount): $700 / 500 Employees; publicly traded

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Mr. Kavi was a product manager for Cascade Corporation, a public telecommunications systems company. He worked under the leadership of Desh Deshpande and Dan Smith, who later started Sycamore Networks. Mr. Kavi did stay with the company and was transferred to the west-coast. He left the new combined company shortly before Ascent was sold to Lucent Inc. in 1999 for approximately $20 Billion.

APPENDIX F

Interview Summary; Darmesh Shah

Date of interview: January 2007

Name and position of person: Darmesh Shah; CEO; Chief Software Architect

Company (pre-acquisition): Pyramid Digital Solutions, USA

Company (post-acquisition): SunGard Business Systems, USA

Date of acquisition: August 2005

Length of integration process: 1-2 months

Size of transaction: Approximately $50 Million

Size of acquired company: $Unknown / 100 Employees

Size of Acquirer (Revenue/Headcount): $11Billion / Employees; publicly traded

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Darmesh Shah founded Pyramid Digital Solutions, an enterprise software company. He acted as CEO and Chief Software Architect. Under his leadership, Pyramid demonstrated significant revenue growth and was a three time recipient of the prestigious Inc. 500 award. In 2005, Pyramid was sold to SunGard Systems, an $11 billion technology company. Mr. Shah has a B.S. in Computer Science from UAB and an M.S. in Management of Technology from MIT. He is an active member of the entrepreneurial community in New England and has recently started a new software company called "Hubspot".

APPENDIX G

Interview Summary; Mary Ann Kuo, Precision Drilling Co.

Date of interview: December 2006

Position of person interviewed: Managed Integration

Company (pre-acquisition): Reeves Oilfield Services Ltd., UK

Company (post-acquisition): Precision Drilling Co., CAN

Date of acquisition: 2004

Length of integration process: Several months

Size of transaction: Approximately $168 Million

Size of acquired company: $90 Million / 500 Employees

Size of Acquirer (Revenue/Headcount): $1Billion / 1200 Employees; publicly traded

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Ms. Kuo managed the integration of Reeves Oilfield services into Precision Drilling Co. This acquisition was a success and the integration process went well. Both companies had an integration strategy which included a cultural and human due-diligence process as a center piece. Other key elements were: Openness on both sides, analyzing the ranks and positions in both companies, determined who is key, and a process to identify key employees. All formal organizational changes were done within the first six months. Operations with the most overlap were combined within three months. As a result of this well managed acquisition, the attrition rate was less than 2% in the first year after the deal. Two years later, Precision Drilling was sold to Weatherford for $1.5 Billion.

APPENDIX H

<u>Interview Summary; Dr. Peter Norris</u>

Date of interview: February 2007

Name and position of person: Peter Norris; Founder, CEO

Company (pre-acquisition): NZ - Technologies, USA

Acquired by: Corning Inc., USA

Date of acquisition: February 2000

Length of integration process: 3 - 4 months

Size of transaction: Approximately $50 Million

Size of acquired company: $Unknown / 80 Employees

Size of Acquirer (Revenue/Headcount): $6Billion / 40,000; publicly traded

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Dr. Norris started NZ-Technologies in 1992. The company had the Intellectual Property and technology to produce opto-ceramic materials with unique properties used in various applications. Corning acquired NZ-Technologies in early 2000 for approximately $150 millon. NZ never had commercial sales until that point. Corning made two equity investment in NZ about 2 years prior to the acquisition, buying 10% and 20% of NZ's stock. The acquisition of the outstanding NZ stock changed the focus of the company completely towards optical components.

The Integration Process

The integration team recommended several changes related to the NZ infrastructure, such

as in IT and finance. Corning wanted the integration to happen quickly, but the small company had to execute the plan. Corning employees were transferred to NZ which created huge problems and tension between one Corning team versus the other. NZ's name was changed into Corning Applied Technologies (CAT). With limited resources in sales and marketing it was difficult to cover North America and Europe, but the small NZ sales group was focused and devoted. The goal was to push CAT sales by using the large Corning international sales organization. Many Corning people were assigned to CAT, but nobody from sales and marketing was devoted. In customer meetings with Nortel, Lucent and Alcatel, the CAT products did not get much airtime.

What could have been differently?

Dr. Norris recommends being realistic about what a small company like NZ can provide in terms of manufacturing. Expectations were too optimistic. The financial models built prior to the deal did not hold up to reality, which increased the pressure on both sides to make this work. He recommends getting a free pass in manufacturing for up to two years, not using the big company standards. For immediate changes the large company must provide resources to execute. In his opinion, the integration should be stretched over a much longer period, maybe as long as two years in order to allow cultural and logistical transition.

APPENDIX I

Interview Summary; Dr. Cliff Robinson

Date of interview: March 2007

Name and position of person: Dr. Cliff Robinson; Director, Business Incubator, Photonics Center, Boston University

Company (pre-acquisition): n/a

Acquired by: n/a

Date of acquisition: n/a

Length of integration process: n/a

Size of transaction: n/a

Size of acquired company: n/a

Size of Acquirer (Revenue/Headcount): n/a

Dr. Robinson is the Director of the business incubator located at the Photonics Center of Boston University. Under his guidance, almost 30 start-up companies have been started over the last 8 years. He has seen the companies maturing and leaving the center once they have reached a certain size, typically after 2-3 years. Many of the incubator companies have been acquired when leaving the center. From his perspective, it takes too long to grow small companies organically, and therefore, an early exit is desired. He points out that it is important that the acquirer has well matched systems which are prepared to receive technology, prototypes, products, processes, and people, and supports these within the division and across the company.

APPENDIX J

Interview Summary; Dominique Hurley

Date of interview: February 2007

Name and position of person: Dominique Hurley

Company (pre-acquisition): Optas Inc.

Acquired by: Dendrite, Co.

Date of acquisition: n/a

Length of integration process: n/a

Size of transaction: n/a

Size of acquired company: 30 employees

Size of Acquirer (Revenue/Headcount): $500 million / 2,500 employees

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Ms. Hurley has been a sales and marketing executive in several companies and has gained first hand experience in mergers and integration processes. She is currently the Vice President of Sales and Marketing for Optas, a relationship and data management firm, acquired by Dendrite Corporation, a mid-cap publicly traded company.

APPENDIX K

Interview Summary; Jean-Louis Malinge

Date of interview: April 2007

Name and position of person: Jean-Louis Malinge; Vice President & General Manager

Company (pre-acquisition): Formerly Corning Inc.

Acquired by: n/a

Date of acquisition: n/a

Length of integration process: n/a

Size of transaction: n/a

Size of acquired company: n/a

Size of Acquirer (Revenue/Headcount): n/a

Mr. Malinge initiated the NetOptix deal. He was a Vice President and General Manger of one of the Photonics divisions at Corning. He was instrumental in making this acquisition happen, before and after the deal.

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