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"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success than to take the lead in the introduction of a new order of things."
Jean-Jacques Rousseau

Managing acquisitions is one of the hardest jobs a CEO has – and I am talking about friendly deals. It's amazing how fast things can fall apart.
Norm Augustine, retired CEO, Lockheed Martin, "Fortune", September 2, 2002

SUMMARY

Abstract

Mergers and acquisitions are a frequent phenomenon of the past decades, yet more than 50% of them fail to achieve their strategic and financial objectives. However, those who work, create a significant value. This paper deals with the post-acquisition integration process, trying to identify the key factors that determine a positive outcome of an M&A and establish how integration failures can be overcome. The questions raised are what are the challenges that both the acquiring as well as the acquired company face after the deal was closed and how the integration of the acquired company can happen, so that the new firm adds value. However, the analysis of post-acquisition integration is still difficult, since researchers have limited insight – maybe one of the reasons why so many mergers are mismanaged and continue to generate disappointing results.[1] This suggests that mergers and acquisitions, even though performed by so many companies and within various industries, are generally not well understood in practice.[2]

Larsson and Finkelstein (1999)[3] developed and tested an integration model based on an interrelationship among strategic, organizational and human resource factors and this paper aims at testing this model by analyzing the integration strategies of one of the most successful acquirers nowadays, the Danaher Corporation, a major electric technology concern. Over the past decades, Danaher has done an excellent job integrating its over 400 purchases, "expanding acquired-companies' margins, and generating free cash flow in excess of net income"[4], being often called in the business press as a "well-oiled acquisition machine".

We begin by explaining what M&As really are and why they are such an important strategic tool for growing companies, and continue then with reviewing the literature about strategic, organizational and HR integration issues. The case study will discuss then the way these integration aspects are approached within Danaher and raise question marks about possible risks that might interfere with a smooth integration process, leading to poor synergy realization.

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[1] Chatterjee et al. 1992, Haspeslagh and Jemison 1991, Schweiger and Walsh 1990
[2] Jemison and Sitkin 1986, Hitt et al. 1991, Porter 1987
[3] Larsson, R., Finkelstein, S., "Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization", Lund University, Sweden 1999
[4] http://www.businessweek.com/investor/content/oct2005/pi20051011_3372_pi008.htm

PART A

CHAPTER 1 - Introduction

Structure of the chapter:

- Introduction
- What are M&As?
- Why do Companies Engage in M&As?
- Types of M&As

The present economic environment has had an important impact on recent corporate strategies, leading to a 30% shrinking of the global merger and acquisition market in 2008, after five years of constant growth, reaching last year a total of 2.89 trillion dollars.[5] The USA market suffered most with 38% less mergers, followed by Europe with 29%, while Asia-Pacific was the least affected out of the three continents, with a decrease of 12% .

Despite the current economical struggles however, the expansion through mergers and acquisitions remains a central corporate strategy tool. There is no doubt that mergers and acquisitions (M&As) have a considerable impact on the companies involved in the process. A successful M&A can add substantial value to both, the acquiring and the acquired company and can bring increasing revenues to shareholders, while failure can destroy value or even bring the company to bankruptcy as it was the case for example of Penn Central Transportation, a merger between New York Central, a railroad operating in the Northeastern United States, and its rival the Pennsylvania Railroad[6] or the case of Warnaco, who, following post-merger integration failures, was pushed into bankruptcy.[7]

M&As have been however determining for companies like Siemens, Nokia or Inbev who wouldn't have become global leaders without this strategy, proving that they are a powerful strategic tool that can do a lot of damage when

[5] Thomson Reuters, "The International Mergers & Acquisitions Review 2008"
[6] New York Central and Pennsylvania Railroad merged in 1968 and one year later, the bankrupt New Haven was also added to Penn Central. This merger failed in 1970 mostly because of large financial costs and lack of an official merger plan. In 1970 Penn Central declared bankruptcy, at the time being the largest corporate bankruptcy ever declared. Source: Solomon, B., Schafer, M., "New York Central Railroad (Railroad Color History Series)", Motorbooks International (July 1999) and http://wapedia.mobi/en/Metro-North_Railroad
[7] The Warnaco Group, producer of Calvin Klein jeans, filed for bankruptcy protection in 2001, being unable to pay debt from acquisitions and licensing agreements, The New York Times, http://query.nytimes.com/gst/fullpage.html?res=9801E3D91F38F936A35751C0A9659C8B63, February 2003

implemented incorrectly, but that can increase total value substantially if performed the right way.

1.1. What are M&As?

In order to analyze the factors that influence success or failure of mergers and acquisitions, we first need to understand what they are. General definitions conclude that "mergers mean any transaction that forms one economic unit from two or more previous ones"[8] or "a fusion or a take-over with or of a company or parts of a company or subsidiaries."[9]

Here are just a few examples of some of the most important M&A's from the past decade:

Year	Acquirer	Target
2008	Microsoft	Komoku
2008	HP	Tower Software
2008	Oracle	AdminServer
2007	Royal Bank of Scotland plc, Banco Santander SA, Fortis NV	ABN AMRO Holding NV
2007	Nokia	Navteq
2007	Danaher Corporation	Tektronix
2005	Telefónica SA	O2 Plc.
2004	Royal Dutch Petroleum Co.	Shell Transport & Trading Co
2004	Sanofi-Synthélabo SA	Aventis SA
2000	America Online Inc. (AOL)	Time Warner Inc.
2000	France Télécom SA	Orange Plc.
2000	Glaxo Wellcome Plc.	SmithKline Beecham Plc.
1999	Pfizer	Warner-Lambert
1998	Daimler-Benz	Chrysler
1998	Exxon	Mobil Oil

Table 1: Examples of famous M&A's of the past decade

8 Weston, J. Fred, Chung, S. Kwang, Hoag, E. Susan, „Mergers, Restructuring, and Corporate Control", 1990 Prentice-Hall, p. 4

9 Merkel, R., Behrens, R., "Mergers und Acquisitions: das Milliardengeschäft im gemeinsamen europäischen Markt", Schaeffer-Poeschel, 1990

The number of mergers and acquisitions and their value between 2000 and 2006 is staggering, despite their reduced number following the stock market downturn of 2002:

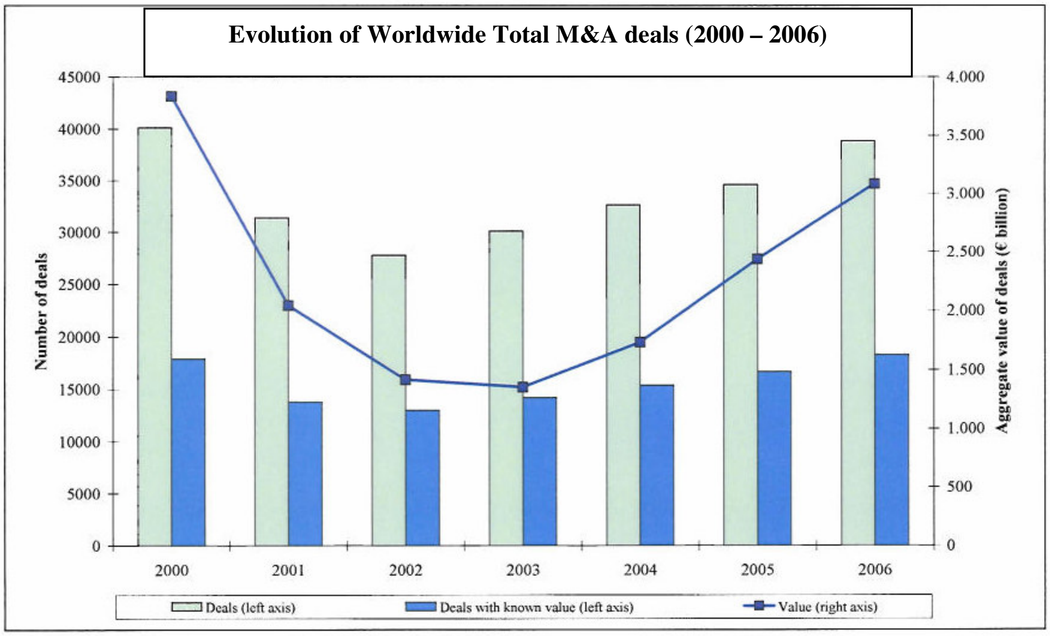

Fig. 1: "Evolution of Worldwide Total M&A deals (2000 – 2006)",
Source: European Commission, Economic and Financial Affairs Publications,"Mergers and Acquisitions", Note Nr. 4, April 2007

Besides, M&As are not limited to only one industry, they happen across most various sectors, such as financial services (JPMorgan Chase and Bear Stearns 2008 or Bank of America and Merrill Lynch 2008), pharmaceuticals (Glaxo Wellcome and SmithKline Beecham in 2000), entertainment industry (Walt Disney Co. and Capital Cities/ABC Inc. in 1995), chemicals (Basell and Lyondell Chemicals in 2007) or consumer goods (Procter & Gamble and Gillette in 2007).

1.2. Why do Companies Engage in M&As?

In order to be able to quantify the success or the failure of M&As, we have to understand the different reasons why they happen. A study performed by A.T. Kearney[10], a global strategic management consulting firm, based on personal interviews with 30 integration managers in Europe, the United States and Australia identified several merger objectives, ranked by the integration managers according to their importance.

[10] A.T. Kearney, „Three Years After the Marriage, Merger Integration Revisited", 2008

The two most important reasons mentioned were **"expansion of the geographic footprint"** and **"volume and scale increase for cost synergies"** (both mentioned by 52% of the interviewees), followed by **"expansion of business portfolio"** (42% of the interviewees), **"enlargement of the product and technology portfolio"** (32%), **"broadening the existing customer base"** (26%), **"elimination of the competitors"** (23%), **"acquisition and restructure of financially weak target"** (13%), **"meet shareholder and stock market expectations"** (10%), **"integrate downstream customer or vendor into value chain"** (7%), **"integrate upstream supplier into value chain"** (7%) and **"expand competencies"** (3%). So according to this study, 67% of the merger reasons were *growth related*, 24% wanted to achieve *cost savings* and 9% pursued *other objectives*.

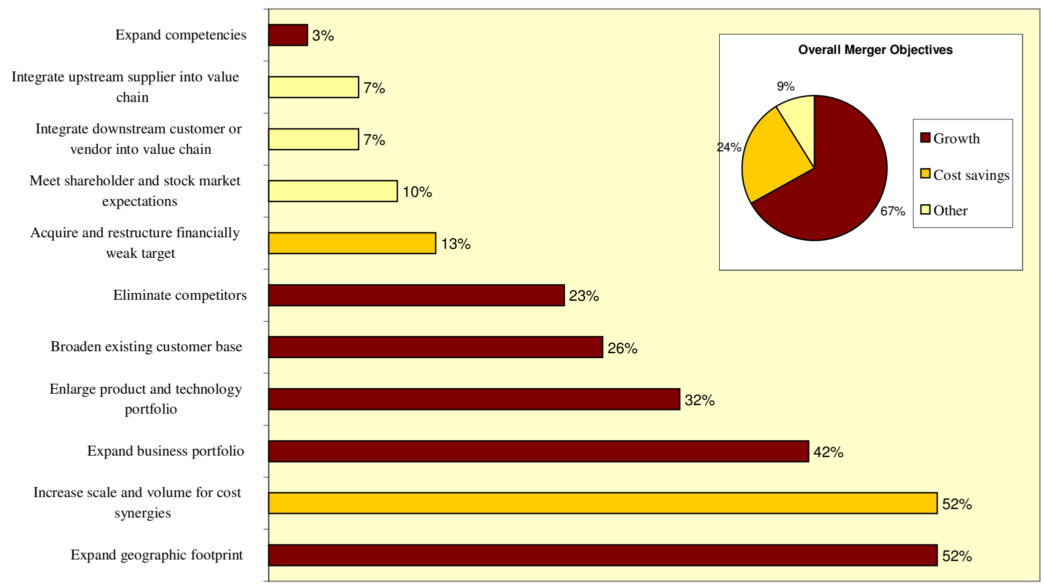

Fig. 2: "Merger Objectives",
Source: A.T. Kearney, „Three Years After the Marriage, Merger Integration Revisited", 2008

Jensen and Ruback[11] identified in their study from 1983 the following reasons why an acquiring firm would want to adopt an M&A strategy:

- **To reduce production or distribution costs**
  - by using economies of scale
  - through vertical integration

[11] Jensen, M.C., Ruback, R.S., "The Market for Corporate Control: The Scientific Evidence", Journal of Financial Economics 11, 5-50, 1983

- by adopting more efficient technology
- by using the acquirer’s management team
- by reducing agency costs through common owned assets

➢ **Financial reasons**
- the possibility of accessing underutilized tax shields
- to avoid bankruptcy costs
- to increase leverage opportunities
- tax advantages

➢ **To gain market power in product markets**

➢ **To eliminate inefficient target management**

And Barney (1996)[12] suggests further M&A driving forces:

➢ **Ensuring survival**

When competitors use the M&A strategy as an option to grow, then failing to use the same strategy might represent a competitive disadvantage for a company. When IBM acquired Lotus in 1995, even though the reason was not directly to ensure survival, IBM wanted to gain a competitive advantage towards its main competitor, Microsoft.[13] ,[14]

➢ **Free cash flow**

The companies who have a high amount of free cash flow might choose M&As as a strategy to generate normal economic performance. Free cash flow is the cash flow in excess of that required to fund profitable capital projects[15], or, in other words, the amount of money a company has left to undertake investments after all its ongoing businesses have been funded. Usually, companies who have limited investment opportunities (like in the case of the tobacco companies, where the operations are profitable, but the investments are limited by health regulations or regulatory constraints) generate a lot of free cash flow and have to decide what to

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[12] Barney, J.B., „Gaining and Sustaining Competitive Advantage”, Addison Wesley Publishing Company, 1996, p. 449

[13] Kirkpatrick, D., "The Internet Saga Continues…IBM and Lotus: Not So Dumb After All”, Fortune, July 8, 1996, pp. 62-69

[14] Barney, J.B., „Gaining and Sustaining Competitive Advantage”, Addison Wesley Publishing Company, 1996, p. 449

[15] Ross, S., Westerfield, R.W., Jaffe J., “Corporate Finance”, 6th Edition, The McGraw−Hill Companies, Inc., 2003, p. 37

do with it. One option would be to distribute it to its shareholders through dividends, but this can be difficult in the case of high marginal tax rates, therefore sometimes they might prefer the company to reinvests this money. A viable option in this case are M&As.

- **Agency problems**

Sometimes M&As are performed with the sole purpose of creating advantages for the managers, even though they don't generate additional profits for the shareholders. The managerial board might pursue a diversification of the human capital inside the company, or, if the manager's salary and bonus depend directly on the size of the firm, he would have an incentive of entering an M&A strictly for personal purposes. There are studies concerning these agency problems, like for example Morck, Shleifer and Vishny (1990)[16] arguing that by acquiring companies pursuing personal benefits, managers can actually make their own company less attractive than before.

- **Managerial hubris**

This hypothesis belongs to Richard Roll[17], saying that managers in acquiring firms have the unrealistic belief that they could manage better the assets of the acquired company than the targeted company could ever do. Therefore they engage in M&As, even though they gain only normal profits from this strategic choice.

- **The potential for above-normal profits**

The possibility of earning extraordinary profits represents a very strong incentive in many decisions of engaging in an M&A.

We have to differentiate however between the reasons of the acquiring firm and those of the purchased company. Thus, Evans and Bishop (2001)[18] and Wirtz[19] distinguish between buyer's and seller's motivations:

[16] Morck, R., Shleifer, A., Vishny, R.W., "Do Managerial Objectives Drive Bad Acquisitions?", Journal of Finance, American Finance Association, vol. 45(1), pages 31-48, March 1990

[17] Roll, R., "The Hubris Hypothesis of Corporate Takeovers", Journal of Business, 59, 2, 197-216, April 1986

[18] Evans, F. C., Bishop, D. M., "Valuation for M&A", John Wiley & Sons, Inc., 2001

Common Seller Motives
• Personal desire to leave due to age, poor health, family pressure, burnout
• Owners' need for estate planning
• Lack of a successor, including conflicts among family members and owners or loss of key people
• Need for additional capital to finance growth
• Weak or declining performance, growing financial difficulties and debts
• Presence of strategic disadvantages that cannot be overcome as a standalone business
• Market or industry conditions that create strong sale prices
Common Buyer Motives
• Expand product lines or geographic markets
• Obtain better growth opportunities
• Enhance profitability and cash flow through revenue enhancement or cost reduction
• Enhance competitive strengths or reduce weaknesses
• Acquire needed technology or capacity faster than through internal expansion
• Prevent competitors from entering that market
• Better employ surplus capital or management
• Diversify to minimize risk

Jones (2004)[20] mentions as other possible driving forces for M&As the market variations, such as changes in the economy (changes in demand and technology, globalization) or variations on the stock market and the market for corporate control, while Cantwell and Santangelo (2002)[21] divide the reasons in *Competitive Considerations* (such as Increasing market and/or political power, Defensive reactions, Economies of scope or synergies, Cost savings), *Responses to a Changing Environment* and *Inefficient Capital Markets.*

As we have seen, the M&A literature distinguishes between many different reasons a company might want to enter a merger or acquire another company,

[19] Wirtz, B.W., "Mergers & Acquisitions Management, Strategie und Organisation von Unternehmenszusammenschlüssen", Gabler
[20] Jones, T., „Business Economics and Managerial Decision Making", John Wiley & Sons, Inc., 2004
[21] Cantwell, J., Santangelo, G.D., „M&A's and the Global Strategies of TNCs", The Developing Economies, XL-4, December 2004, pp. 400 - 434

ranging from financial and strategic motives to personal ambitions. It is however very important to understand the initial reasons for this choice, as they have a huge impact on the further development of the transaction and on the post-merger integration process, explaining the managerial behaviour. As Joseph L. Bower[22] said, "*if you acquire a company because your industry has excess capacity, you have to figure out quickly which plants to choose and which people to lay off. If, on the other hand, you acquire a company because it is developing a hot technology, your challenge is to hold on to the acquisition's best engineers*".

1.3. Types of M&As

The reasons leading to this strategic move also determine the type of M&As. Many authors, such as Weston, Chung and Hoag (1990)[23] or Evans and Bishop (2001)[24], usually distinguish between three types of mergers:

- Horizontal mergers
- Vertical mergers
- Conglomerate mergers,

while other authors, like Larsson and Finkelstein (1999)[25] and Barney (1996)[26] mention two additional types of mergers:

- Product extension merger
- Market extension merger

The **horizontal mergers** occur between two companies from the same market, creating a new entity with a larger market share. The reason behind this type of merger is to gain more market power and to eliminate competition by acquiring

[22] Bower, J.L., "Not All M&As are Alike – and That Matters", Harvard Business Review, March 2001, pp. 93 - 101
[23] Weston, J.F., Chung, K.S., Hoag, S.E., „Mergers, Restructuring and Corporate Control", London 1990
[24] Evans, F. C., Bishop, D. M., "Valuation for M&A", John Wiley & Sons, Inc., 2001
[25] Larsson, R., Finkelstein, S., "Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization", Lund University, Sweden 1999
[26] Barney, J.B., „Gaining and Sustaining Competitive Advantage", Addison Wesley Publishing Company, 1996, p. 449

the opposite player. A popular example for this type of merger is the one between Daimler-Benz and Chrysler in 1998, which lasted however only until 2007. Some sectors tend to attract mostly this type of mergers, like for instance the legal services, where smaller firms want to merge into more powerful entities.[27]

The **vertical mergers** happen when two companies operating on different levels of a production process join their forces to either forward or backward integrate. Backward integration happens when a company integrates another firm closer to the raw material source and forward integration occurs when the acquired company is situated closer to the end consumer. One example of a vertical merger is the one between Synopsys, Inc., a technology leader for complex integrated circuit design, and Avant! Corporation, a leader in physical design and transistor-level design tools for the integrated circuit industry.

Conglomerate mergers mean that two companies from two different markets, producing different products decide to merge. Kelso's acquisition of Nortek is an example of conglomerate merger. Nortek Inc. is a leading home technology, air conditioning and heating products manufacturer, while Kelso & Co. is a private equity firm based in New York City, the two companies being totally unrelated.

Another type of merger is the **product extension merger**, where companies acquire complementary products. An example for this type of merger would be Philip Morris's acquisition of Kraft in 1988 with the purpose of extending its presence in the consumer foods market.

The main reason behind the **market extension merger** is the geographical spread by gaining access to new regions. RBC Centura, a full-service financial institution situated in the SE part of the United States, acquired Eagle Bancshares Inc. in 2002, a unitary thrift holding company based in Atlanta. Through this merger, RBC accessed one of the fastest growing markets in the United States.

After having explained the various motives for merging and identified the different types of M&As, we will now focus on the main point of interest of this

[27] Jones, T., „Business Economics and Managerial Decision Making", John Wiley & Sons, Inc., 2004

thesis, that is what happens after the deal was closed, what are the factors that determine the success and what are the key steps for a successful post-merger integration.

CHAPTER 2: Post-Merger & Acquisition Integration

Structure of the chapter:

- The Importance of the Post-M&A Integration Process
- Larsson and Finkelstein's PMI Model
  - ✓ Strategic Combination
  - ✓ Organizational Integration
    - Organizational Patterns
    - Cultural Differences
    - Barriers in Knowledge Flow
    - Conflicting Technologies
  - ✓ HRM Considerations

2.1. The Importance of the Post-Acquisition Integration Process

Even though M&As are such a widespread phenomenon, less than half of the deals achieve their objectives and create additional value for the shareholders. Many scholars have tried to analyze the reasons for such large scale failures, but because mergers are so complex and diverse, it is hard to come up with a complete satisfactory explanation of the different outcomes, especially since the insight in companies engaged in M&As is limited.

Besides, a lot of studies were initially focused on the financial determinants as a measurement for success, paying little attention to what happens in the post merger phase and to factors of influence like ***organizational integration*** or ***employee reaction***.[28] However, a significant part of the merger value can be and is created during the integration stages.[29],[30] In many cases, failures of M&As can be traced back to the fact that the integration tasks are strongly underestimated in the post merger phase, therefore recent research and practical experience underline the importance for any merger or acquisition, that the integration of both companies is properly planned and executed (e.g. Haspeslagh and Jemison 1991[31], Pablo 1994[32], Shrivastava 1986[33]).

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[28] Schweiger, D.M., Walsh, J.P., „Mergers and Acquisitions: An Interdisciplinary View. Research in Personnel and Human Resource Management", 1990

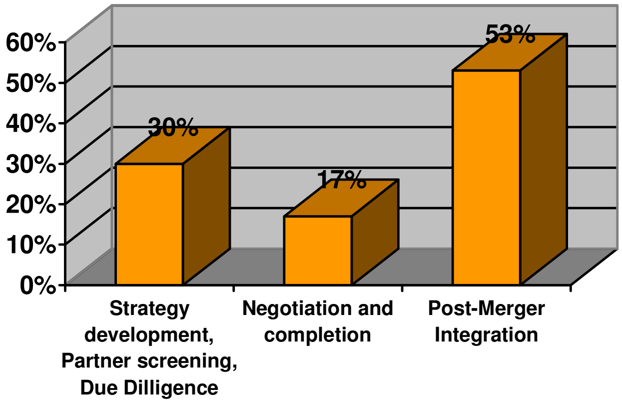
[29] Haspeslagh, P.C, Jemison, D.B., "Managing Acquisitions: Creating Value Through Corporate Renewal", Free Press, New York, 1991

[30] Pablo, A.L., "Determinants of Acquisition Integration Level: A Decision-Making Perspective", Academy of Management, Journal 37, 1994, pp. 803-836

[31] Idem 30

[32] Idem 31

[33] Shrivastava, P., "Postmerger Integration", The Journal of Business Strategy, 7 (1), 1986, pp. 65-76



Furthermore, a study conducted by A.T. Kearney shows that exactly the post-M&A integration phase contains the highest risk behind a merger: 30% hides during the strategy development phase, 17% within the negotiation and completion and 53% in the post merger phase.

Fig. 3: "Risk Percentage Behind M&As Phases"
Source: Träm, Michael: „Post-Merger-Integration:
Sieben Regeln für erfolgreiche Fusionen - ein Ansatz von A.T. Kearney", 2000

The organizational theory has focused lately intensely on the post-combination integration process, trying to understand how previously independent entities can be combined into one whole[34],[35] by integrating their ***cultures*** and ***structures*** with the purpose of achieving synergy. The concept of synergy means that taken together, as a whole, the two merging companies create a higher value than if taken separately.[36],[37].

After the deal was legally closed, the burden of accomplishing the financial and strategic objectives and realizing the synergies settled during the valuation process falls on the integration process of the merger partners. There are however types of synergies that can be achieved more easily than others, such as *cutting personnel* or *improving existing distribution channels*, while other types of synergies, like *cross-selling new or complementary products* or *developing new distribution channels* might be challenging and difficult to measure.[38] This proved to be unfortunately true for the merger between HP and Compaq, where although the employees of both companies spent a total of more than 1,000,000 hours on

[34] Haspeslagh, P.C, Jemison, D.B., "Managing Acquisitions: Creating Value Through Corporate Renewal", Free Press, New York, 1991
[35] Pablo, A.L., "Determinants of Acquisition Integration Level: A Decision-Making Perspective", Academy of Management, Journal 37, 1994, pp. 803-836
[36] Fuller, R.B., „Synergetics", New York, MacMillan, 1975
[37] Hitt, M.A., Harrison, J.S., Ireland, R.D., „Mergers and Acquisitions: A Guide to Creating Value for Stakeholders", New York, Oxford, 2001
[38] Stahl, M.G., Mendenhall, M.E., „Mergers and Acquisitions, Managing Culture and Human Resources", Stanford University Press

planning and analyzing the integration, in the end the company reported twice as higher losses than expected only few weeks earlier.

Speed is also a key issue during the integration process: preparation for synergy realization should start before the deal is actually legally closed and continue until after the acquired company or the merger partners have been completely integrated. A complete integration is finalized when the new created organization has established the presumptions for successfully achieving its financial and strategic targets. The integration process has to be planned carefully and the integration managers have to follow clear objectives.

First of all, any uncompleted analytical activities prior to the deal closing have to be finalized, so that actions towards the physical integration of the merging companies can be executed. The main goal of the post merger integration process however, is to "rebuild the organization into a stronger, more competitive entity capable of realizing financial and strategic objectives"[39] and it is advisable to start preparing as soon as possible. Sometimes, when big companies are involved, waiting for legal approval of the merger or acquisition can take several months, time that could be used wisely to start preparing the integration. Some companies use this time while others waste it.

In 2000, Pfizer acquired Warner-Lambert, bringing together two of the fastest-growing companies in the pharmaceutical industry. With Warner-Lambert, Pfizer gained product lines ranging from Parke-Davis branded pharmaceuticals to Listerine mouthwash to Schick and Wilkinson Sword wet-shave products.[40] In this case, Pfizer's integration managers began preparing for the combination before they received legal approval. They organized training programs for merger management with the purpose of raising the awareness of the executives regarding the integration realities and meetings for the integration team to underline the importance of teamwork within the planning groups.[41]

[39] Idem 33
[40] http://www.pfizer.com/about/history/pfizer_warner_lambert.jsp, accessed on Monday, 30 March 2009, 12:31
[41] Marks, M.L., Mirvis,P.H., "Making Mergers and Acquisitions Work: Strategic and Psychological Preparation", Academy of Management Executive, 2001, Vol. 15, No. 2, pp. 80 – 94

2.2. Larsson and Finkelstein's PMI Model

Larsson and Finkelstein[42] underlined the fact that the post-merger integration literature is fragmented into several research areas, such as:

1. Strategic Management, that studies M&As as a method of diversification, focusing on motives for the different types of combinations and the performance of each of those types.
2. Economics, which analyzes factors such as economies of scale and market power as reasons for engaging in an M&A, measuring acquisition performance mainly with accounting tools.
3. Finance, where acquisition performance is measured based on the stock market.
4. Organizational research that emphasises culture clash and conflict resolution.
5. Human resource management that focuses on psychological issues, importance of effective communication and how M&As affect careers.

Due to this fragmentation, the two authors developed an integration model that combines theoretical perspectives on the ***strategic combination***, ***organizational integration*** and ***HRM***. According to them, the strategic integration of mergers and acquisitions is a function of M&A performance. The economic literature generally measures M&A performance based on accounting tools, whereas finance emphasises stock returns for this purpose, both of them treating post-acquisition processes as unimportant. Larsson and Finkelstein however, conceptualize M&A performance in terms of synergy realization. They define synergy as "the actual net benefits (reduced cost per unit, increased income, etc.) created by the interaction of two firms involved in a merger or acquisition", affirming that synergy is affected by ***strategic***, ***organizational*** and ***HRM factors***.

[42] Larsson, R., Finkelstein, S., "Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization", Lund University, Sweden 1999

Based on these three integration aspects, we will further analyze the integration process as a source for synergy creation.

2.2.1. Strategic Combination

Reviewing the existing literature, Larsson and Finkelstein come to the conclusion that most M&A theories underline the importance of efficiency gains derived from various synergy sources, including

- operational synergies in production, R&D, marketing and administration through economies of scale, vertical economies and economies of scope
- collusive synergies from market and purchasing power
- managerial synergies from applying complementary competencies or replacing incompetent managers
- financial synergies from risk diversification and coinsurance

All these sources of synergy determine the combination potential and the extent to which these synergies will be achieved after the acquisition was closed. Following further this idea, it means that M&As with low combination potential are less likely to realize significant synergies, whereas M&As with high combination potential are more likely to lead to more efficient synergies.

Many scholars regard the combination potential with regards to the degree of relatedness between the merging companies, omitting however the importance of strategic differences, that might prove to be valuable complementary synergy sources, such as different products, know how or market access that fit one another. Larsson and Finkelstein describe therefore the combination potential in terms of both, the strategic similarities and the strategic complementarities of the merging firms.

In another study, Larsson, Brousseau, Driver and Sweet[43] state that relatedness of merging companies is seen with regards to the similarity of products, markets and production. The highest potential realized by similar organizations is through horizontal M&As that "unite competing entities with overlapping operations". These overlapping operations lead in many cases to redundancies which are usually removed from the acquired company. In essence, "value is extracted from the combination through increased marginal outputs per marginal inputs, using scale economics". But the authors also affirm that synergies can also be achieved through complementary operations between the merging entities, like for example in the case of vertical combinations between supplier and customer companies or market or product extension mergers, where an M&A adds new markets or new products to the new formed organization.

However, no matter how high the combination potential between two merging companies is, it is not enough for achieving the desired synergies. The next integration factor determining M&A success is therefore Organizational Integration.

2.2.2. Organizational Integration

The importance of the post merger integration process was often underlined and sometimes, of all the determinants of the synergy realization analyzed, the organizational integration was the strongest predictor[44], meaning that "the greater the degree of interaction and coordination between combining firms, the greater the degree of synergy realization".

Larsson and Finkelstein define organizational integration as the "degree of interaction and coordination between the two firms involved in a merger or acquisition", affirming that managing the new organization after the acquisition plays a crucial role during the integration process.

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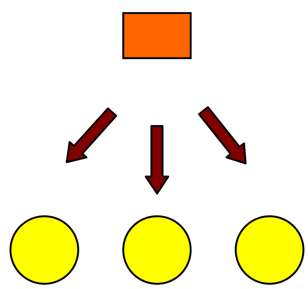
[43] Larsson, R., Brousseau, K.R., Driver, M.J., Sweet, P.L., "The Secrets of Merger and Acquisition Success: A Co-Competence and Motivational Approach to Synergy Realization", published in "Mergers and Acquisitions. Creating Integrative Knowledge" edited by Pablo, A.L., Javidan, M., Blackwell Publishing

[44] Peck, S., Temple, P., "Mergers and Acquisitions, Critical Perspectives on Business and Management", Routledge

2.2.2.1. Organizational Patterns

According to the level of influence that the acquiring company wants to exercise upon the target firm(s), Goold, Campbell, and Alexander[45] distinguished between four types of organizational patterns:

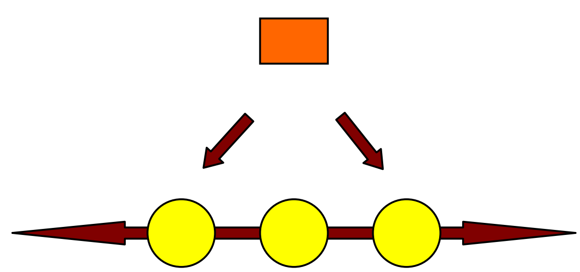
1. *Stand alone influence, where the acquiring company supports a stand alone performance of the acquired firm(s)*



The acquired company is a stand alone profit center in this case. The influence of the acquiring company covers agreeing and monitoring basic performance targets, approving major expenditures or assigning key managing directors. The acquiring company has to pay attention however not to destroy the already existing value of the target company by pressing for unrealistic targets, encouraging for bad investments or appointing the wrong executives.

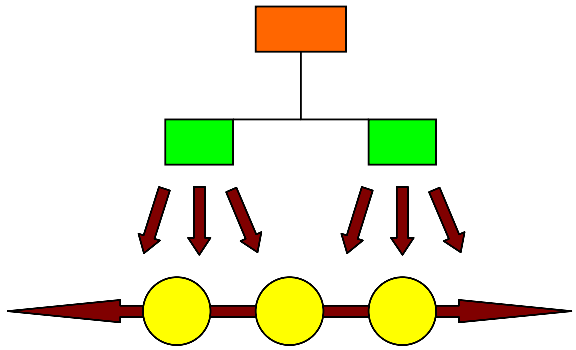
2. *Linkage influence, where the organization is based on linkages between the acquired firm(s)*

In this case, the acquiring company establishes common decision making processes and structures through policies and guidelines to encourage relationships between the acquired firms that would not exist if these firms were independent entities.



[45] Goold, M., Campbell, A., Alexander, M., "Corporate Level Strategy, Creating Value in the Multibusiness Company", Wiley, John & Sons, Incorporated, 1994, p. 78 – 82

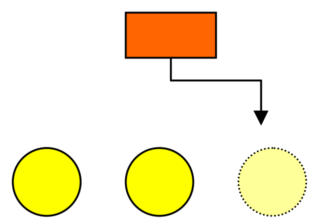
3. *Functional and services influence, where the acquiring company provides functional leadership and cost effective services for the target firm(s)*



The chief executive and the senior line managers of the acquiring companies are in charge of coordinating the activities throughout all the acquired companies, there are however other corporate stuff functions supporting this type of integration.

4. *Corporate development activities, where value is being created through altering the composition of the portfolio of the acquired firm(s)*

In this type of integration, the acquiring company can not only exercise influence upon the existing firms in the portfolio, but also upon the portfolio itself, being able to change the businesses in its portfolio by redefining and changing them.



Haspelagh and Jemison[46] analyzed further the degree of acquisition integration depending on two aspects, *need for organizational autonomy and need for strategic independence*, and came up subsequently with 4 types of acquisition integration approaches:

		Need for Strategic Interdependence	
		Low	**High**
Need for Organizational Autonomy	**High**	Preservation	Symbiosis
	Low	Holding	Absorption

Table 2: "Types of Acquisition Integration Approaches"
Source: Haspelagh, C.P., Jemison, D.B., „Managing Acquisitions – Creating Value Through Corporate Renewal", Free Press,
A Division of Macmillan Inc., 1991, pp.145 - 149

Absorption acquisitions

Absorption acquisitions are those acquisitions where high interdependence is needed for achieving the targeted synergies. In this case, the integration of the acquired company involves full inclusion of operations, organization and culture. This process might take a lot of time, especially if the acquired entity is not a small unit, but a sizeable company.

Preservation acquisitions

In this type of integration, there is a high need for autonomy and a low need for interdependence between the merging organizations. In this case, the purpose of the managerial board is to keep the source of the acquired benefits intact, because a change within the acquired company's practices could negatively affect success.

Symbiotic acquisitions

Symbiotic acquisitions occur when there is a high need for both, strategic independence, when capability transfer must take place, and organizational autonomy, because the acquired capabilities need to be preserved. This type of

[46] Haspelagh, C.P., Jemison, D.B., „Managing Acquisitions – Creating Value Through Corporate Renewal", Free Press, A Division of Macmillan Inc., 1991, pp.145 - 149

integration raises most challenges, as "the two organizations first coexist and then gradually become increasingly interdependent".

Holding acquisitions

By using this type of integration approach, the acquiring firm has absolutely no intention of integrating the new company except by creating value through financial transfers, risk-sharing or general management capabilities.

After analyzing the various levels of influence that the acquiring company wants to exercise upon the target firm and the different types of integration approaches, we conclude that there is a great literature support on Larsson's and Finkelstein's affirmation, that organizational integration can be divided into:

1. the degree of interaction between the joining companies through actions such as restructuring and material flows
2. the extent of coordinative effort to improve the quality of the interaction through special integration teams, preplanning etc...

However, each type of integration approach represents a challenge and can destroy value if performed incorrectly and there are many cases of failures. There are various reasons why implementing mergers and acquisitions strategies may cause problems, most of them being related to operational, functional, strategic and cultural differences between the acquiring and target firms.[47] These differences can be very different from case to case and cover a wide range of departments. For instance, the bidding company and the target firm might have different computer systems and conflicting technologies, therefore the integration managers have to assure that a common operating technology will be designed. Other differences may consist of distinct human resources policies or widely different customer relationships, but several scholars argue that perhaps the most important difference is the cultural one (Cartwright and Cooper (1993)[48],

[47] Barney, J.B., "Gaining and Sustaining Competitive Advantage", Addison Wesley Publishing Company, 1996, p. 471
[48] Cartwright, S., Cooper, C.L., "Managing Mergers, Acquisitions, and Strategic Alliances", Butterworth-Heinemann, 2nd edition, 1995, p.84

Chatterjee et al. (1992)[49]). If very different, the organizational cultures of two merging companies can cause management conflicts and tedious business processes, who can threaten the financial and strategic objectives. Therefore, the cultural aspects require special attention during the post merger integration process.

In the following pages, we will have a look at various factors that can have a decisive influence upon the integration approaches and their outcome, such as cultural differences, barriers in knowledge flow and conflicting technologies.

2.2.2.2. Cultural Differences

In an environment where companies merge or perform acquisitions on a global scale, organizations have to interact, manage, negotiate and compromise with people from different cultures. Working with people whose values and beliefs, not to mention languages and customs, are very different from one's own, can lead to costly misunderstandings and even business failures.[50]

After deciding to engage in a merger or acquisition in another country, a company has to be prepared to face a different country culture. Hofstede[51] describes culture as the "collective programming of the mind" and argues that it is a combination between human nature and individual personality. He introduced a model explaining the four dimensions in which cultures can vary:

- **Power Distance**: This value measures the extent to which people accept the fact that power is distributed unequally.
- **Individualism versus Collectivism**: In some countries people forge their own destiny, while in others, people are integrated into strong cohesive in-groups from birth on.

[49] Chatterjee, S., Lubatkin, M.H., Schweiger, D.M., Weber, Y., „Cultural Differences and Shareholder Value in Related Mergers: Linking Equity and Human Capital", Strategic Management Journal, Vol. 13, No. 5, John Wiley & Sons, Ltd., 1992, pp. 319-334

[50] Höcklin, L.A., "Managing Cultural Differences for Competitive Advantage", The Economist Intelligence Unit, 1993

[51] Hofstede, G., „The Cultural Relativity of Organizational Practices and Theories", Journal of International Business Studies, 1983

- **Masculinity versus Femininity**: A masculine culture is characterized by competitiveness and assertiveness, whereas feminine cultures promote win-win situations.
- **Uncertainty Avoidance**: This value measures a culture's "tolerance for uncertainty and ambiguity". People in high Uncertainty Avoidance cultures tend to fear unstructured situations and feel more comfortable with routine work.

Hofstede continued characterizing not only countries' cultures, but also companies' cultures, therefore six dimensions can be used to distinguish corporations' cultures:

1. Process-oriented versus result-oriented cultures: Does the emphasis lie on the process or on the outcome?
2. Job-oriented versus employee-oriented cultures: Is the corporation responsible for an employee's performance only or does it take responsibility for their well-being also?
3. Professional versus parochial cultures: Do the employees identity themselves with their profession or the corporation they work for?
4. Open systems versus closed systems cultures: Is it easy for outsiders to enter the corporation? How does the internal and external communication work?
5. Tightly versus loosely controlled cultures: What is the corporation's degree of formality and punctuality?
6. Pragmatic versus normative cultures: What is the corporation's degree of flexibility and customer orientation? How fast can it adopt to a changing environment?

A major part of the M&A literature sees cultural differences between the merging companies as the trigger for post deal conflicts. As Schweiger and Goulet[52] affirmed, "beliefs and assumptions shared by the respective employees of the acquirer and target (…) often represent deep-rooted differences between the

[52] Schweiger, D.M., Goulet, P.K., "Facilitating Acquisition Integration Through Deep-Level Cultural Learning Interventions: A Longitudinal Field Experiment", 26, 2005, p.1477

combining firms that can lead to challenges during integration and limit the realization of synergies from this process. (. . .) all acquisitions will be confronted with cultural differences that need to be clarified and managed effectively to avoid cultural conflict.”. The two authors argue that misunderstandings caused by cultural differences can be reduced through interaction, communication and cultural learning. These interactions have to be encouraged by the management team through seminars, cultural exercises within departments, training programs, cross-visits, celebrations, team-building events… etc. And since acquiring companies usually impose their own culture upon the target, it is useful when the management team sets the frames for a common cultural discourse, reducing the acquirer’s temptation to dominate the target’s culture.

Depending on the degree of cultural integration following an M&A deal, we can distinguish between four different types of cultural integration[53]:

- Cultural Pluralism
- Cultural Blending
- Cultural Takeover
- Cultural Resistance

Cultural Pluralism – “Strenght comes from diversity”

In mergers, cultural pluralism is perceived as a source of potential benefits if the creative and motivational elements of an independent company are preserved. This type of cultural integration allows the acquired companies to operate autonomously and cultural diversity exists as a foundation for “shared strategy for growth and organizational success”. The disadvantage of this type of cultural interaction is that even though companies might be able to spread out risk among the various businesses, they do little to achieve true organizational synergies.

Cultural Blending

This cultural integration approach creates a blending or assimilation of two previously very different cultures into a unified one, being typical for “mergers of equals” where no company dominates the other. Best practices

[53] Buono, A.F., Bowditch, J.L., “The Human Side of Mergers and Acquisitions – Managing Collisions Between People, Cultures and Organizations”, BeardBooks, 2003, pp.143-147

and strengths from each culture are mixed into one through high flexibility from the top management's side, effective communication and interaction and lack of "ego trips".

Cultural Takeover

In cultural takeovers, the target company replaces its culture with the dominant culture of the acquiring firm. This approach is possible only under a strong and skillful management that should be prepared to overcome short- and moderate-term cultural conflicts. The authors argue however that much of the effectiveness of this approach is "based on the acquiring organization's reputation for fairness, credibility and success in prior mergers and acquisitions".

Cultural Resistance

Many integration phases result in strong cultural crisis under cultural resistance, which can lead further to management turnover, market-share shrinkage or failure in achieving the established strategic objectives. Cultural resistance occurs when the merging partners don't show understanding of each other's cultures, causing significant challenges to synergy accomplishment.

Which cultural integration type is most likely to occur after an M&A largely depends on two dimensions that employees take into account[54]:

- the degree to which they value their existing culture and whether they believe it's worth preserving or not
- the degree to which they perceive the culture of the other company as attractive

The probability that the acquired employees embrace much more easily the acquirer's culture is higher if the purchaser is regarded as either a financial rescuer or a rescuer from other negative aspects such as an incompetent owner or an unfair management board. Kanter and Corn[55] further sustain the theory that the target's

[54] Cartwright, S., Cooper, C.L., "Managing Mergers, Acquisitions, and Strategic Alliances", Butterworth-Heinemann, 2nd edition, 1995, pp.83-84

[55] Kanter, R.M., Corn R.I., "Do Cultural Differences Make a Business Difference? Contextual Factors Affecting Cross-Cultural Relationship Success", Journal of Management Development, 13, pp.5-23

employees are much more eager to adopt the acquirer’s culture if they have the perception of future organizational success, such as capital investment in the target by acquirer and perceived business compatibility. The adoption of the acquirer’s culture could also be encouraged if people see the integration as beneficial for their careers.[56]

Therefore, according to the intensity of the two above mentioned dimensions, 4 different outcomes are possible:

<table>
<tr><th colspan="2"></th><th colspan="2">Willingness of employees to abandon their own culture</th></tr>
<tr><th colspan="2"></th><th>Very willing</th><th>Not at all willing</th></tr>
<tr><td rowspan="2">Perception of the attractiveness of “the other” culture</td><td>Very attractive</td><td>Assimilation
Potentially smooth transition</td><td>Integration
Culture v collision
Satisfactory integration/ fusion</td></tr>
<tr><td>Not at all attractive</td><td>Deculturation
Alienation</td><td>Separation
Culture v collision
Satisfactory tolerance of multi-culturalism</td></tr>
</table>

Table 3: “Modes of Organizational and Individual Acculturation in Mergers and Acquisitions, and Their Potential Outcomes”
Source: Cartwright, S., Cooper, C.L., “Managing Mergers, Acquisitions, and Strategic Alliances”, Butterworth-Heinemann, 2nd edition, 1995, p.84

This pattern corresponds to the previous model of Buono and Bowditch (2003), where Cultural Pluralism is Separation, Cultural Blending is Assimilation, Cultural Takeover is Integration and Cultural Resistance is Separation.

As a conclusion, we see that cultural differences between merging partners can have very different outcomes, from successful combinations to conflicts and resistance. These possible conflicts and crisis situations can seriously threaten the post-merger integration and the desired synergies, therefore the integration teams and the management board should focus on a systematic cultural integration strategy.

[56] Zueva, A., Ghauri, P., “Managing Post-Acquisition Cultural Change: An Acquired Company’s Perspective”, Working Paper Series, Manchester Business School Working Paper No. 516, 2007

2.2.2.3. Barriers in Knowledge Flow

Knowledge flow between two merging companies can face cultural, structural or other challenges, such as no mentoring and no assisting company environment, having an incentive structure negatively affecting knowledge, large physical or time based distance… etc.

Leyland[57] analyzed the knowledge transfer process as a function of Hofstede's cultural dimensions, arguing that this knowledge transfer is more successful when it is performed between organizations with similar *collectivist cultures*. Otherwise, the opposed views between information providers and information acquirers can lead to barriers in the knowledge flow. In collectivist societies, company knowledge is seen as the property of the organization and is meant to be used for the benefit of any entity, subsidiary or department. The individualistic cultures however, are generally driven by self-interest rather than group interest. Knowledge in this case is valued by the own benefits and not by the benefit of the entire corporation.

Thus, transfer knowledge between the merging companies is very challenging if they are characterized by different **Individualist/Collectivist dimensions**, requiring increased input from the head office. These differences can be overcome through measures such as directives, dictates and persuasion.

The next dimension that Leyland discusses as a determinant of knowledge flow is power distance, affirming that low **Power Distance** contributes to a free exchange of ideas. The process of the decision making in this case is rather participative, whereas in organizations with low Power Distance, this process is autocratic, the companies adopting a paternalistic approach towards the organizational structure. In situations of knowledge transfer between entities characterized by high Power Distance, the process can lead either to total acceptance or total resistance. In most of the cases, however, existing conflicts tend to have a positive outcome, as usually both parties are forced to compromise.

[57] Leyland, M.L., "The Role of Culture on Knowledge Transfer: The Case of the Multinational Corporation", The Learning Organization; 13, 2/3, 2006

Hofstede's third dimension, the **Uncertainty Avoidance** is directly related to the willingness to embrace change. In a company with a strong Uncertainty Avoidance culture, change is seen as a possible threat; therefore employees prefer formalized structures, including detailed directions and established rules. Anything that is new and unknown is considered risky and a potential source of problems, rather than an opportunity to improve operations. Low Uncertainty Avoidance cultures on the other side support a flexible environment, regarding changes as possible promoters of efficiency improvements. Low Uncertainty Avoidance companies have a strong desire to experiment new options and are committed to continuous learning. If both merging companies operate in a low Uncertainty Avoidance environment, knowledge transfer can be implemented highly efficient.

In case of a knowledge transfer process between companies with different levels of Uncertainty Avoidance, the head office's intervention is required to smoothen its execution. This is particularly the case when the knowledge provider operates in a strong Uncertainty Avoidance environment, whereas the information acquirer operates in weak Uncertainty Avoidance, as in this case significant resistance to the knowledge transfer is most likely to happen. Not only that the head office should convince the knowledge provider to engage in knowledge transfer, but may also establish incentives and methods of persuasion.

The last dimension to affect knowledge transfer and analyzed by Leyland is **Masculinity vs. Feminity**. Masculine cultures prefer assertiveness and competing environments, whereas feminine cultures promote cooperation and compromise rather than competition, tending to believe in win-win situations. Knowledge transfer between a feminine cultured provider and a feminine or masculine cultured acquirer tends to be successful. If however, the provider is masculine cultured, then knowledge transfer is unlikely, without the intervention of the home office.

Stahl and Björkman[58] suggest further three types of barriers in knowledge transfer: cognitive barriers, emotional barriers and organizational barriers.

Cognitive barriers arise when the intention to learn is missing. This can be triggered when the organization focuses on objectives other than learning, such as spreading the costs and risks across its different businesses, or achieving economies of scale. It is however often the case in post merger integration phases that the combining entities don't fully appreciate the fact that they could obtain valuable information from one another, not simply because they pursue other primary expansion objectives than learning, but because it takes time to become familiar with the different capabilities and possibilities for learning and knowledge transfer that appear.

Such barriers can occur for instance when acquiring companies are less eager to learn from new purchased organizations, focusing more on exploitation of resources and synergy creation. The integration managers treat the purchased entities as extensions of the parent firm, expecting from them solely passive implementation of the given policy, tactic and strategy. This attitude leads to the frustration, disillusionment, and resentment from the acquired employees.

Emotional Barriers occur when there is mistrust between the merging companies and it takes many efforts from the managers' side to create a trustworthy environment across various divisions and businesses. Direct personal involvement, seminars for fostering communication and personal contact can certainly enhance trust building.

The last barriers according to Stahl and Björkman that determine the degree of knowledge transfer are the **organizational barriers.** These occur when senior managers do not know how to benefit from the opportunity to learn. For example, major problems appeared when American and Japanese managers had to collaborate and the arrogance of the American staff, based on the belief of the

[58] Stahl, G.K., Björkman, I., "Handbook of Research in International Human Resource Management", Edward Elgar Publishing, 2006

superiority of their knowledge, systems and procedures caused them to miss important potential exploitation.[59]

Organizational barriers can also consist of too rigid hierarchical structures or purely physical ones, like inappropriate space arrangements in offices or separated rooms between which no communication is possible.

2.2.2.4. Conflicting Technologies

Pricewaterhouse Coopers released a survey in 2000 performed on senior executives from 125 companies worldwide, aiming at establishing the biggest challenges they had to face during M&A integration phases and came up with the conclusion that integrating information systems is among the toughest post-deal issues. Almost 75% of the companies that participated in the survey claimed to have had problems integrating information systems after a merger.[60]

Thus we see that integrating IT systems plays an important role in the organizational integration of the acquired company. According to Accenture, Information Technology has to fulfil three important roles during post-merger integration:[61]

1. *IT must continue to deliver operational services and capabilities.*

This might sound simple, but when soon after the merger, two information technology organizations come together under one management team, it can raise problems due to different cultures, capabilities, processes, systems, services, etc. of the companies.

2. *Enable the integration of businesses.*

During merger integration, most of the desired synergies rely on IT Systems' support "in the form of connectivity between assets, people and application

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[59] Segal-Horn, S., Faulkner, D., "The Dynamics of International Strategy", Engage Learning EMEA, 1999

[60] http://jacksonville.bizjournals.com/jacksonville/stories/2000/08/28/smallb2.html

[61] Chang, R., „Post-Merger Information Technology Integration: Steering a Smooth Course Through Rough Waters", 2000, http://www.accenture.com/NR/rdonlyres/2D28B202-E913-45B3-B553-E86F1B970DAD/0/post_merger_integration_tech_pov_rev.pdf

support for shared service integration". All efforts have to ensure that IT Systems focus on highly tactical or strategic projects.

3. *Provide a source of cost savings through realized synergies.*
By improving the IT Systems with measures such as rationalization of information technology vendors or better use of data center resources, a lot of cost savings can be achieved.

It is difficult however to implement such an IT System that can simultaneously perform the three tasks mentioned above. Moreover, integrating an operational information technology system may require investments that are conflicting with the cost savings targeted.

Robbins and Stylianou[62] concluded in their study that a successful IT implementation during the post-merger integration is determined by managerial issues which are largely controllable. A positive outcome requires generally strong supportive actions from the executive management, high-quality communication to the employees and a high level of end user involvement in informational system decision making.

2.2.3. Human Resources Management

Now coming back to Larsson's and Finkelstein's model, they argue that much of the M&A literature focuses on individual and collective employee reactions, showing that acquired employees generally have a negative reaction towards the deal, potentially negatively influencing the integration.

The M&A literature has analyzed in dept the human side of the mergers, and many studies draw attention upon the importance of personnel issues during the combination phase. A disorganized personnel policy may lead to frustration, anger, confusion or fear[63], which can lead further to negative outcomes, like

[62] Robbins, S.S., Stylianou, A.C., "Post-Merger Systems Integration: The Impact on IS Capabilities. Information & Management", Vol. 36, 1999, pp.205 - 212
[63] Alaranta, M., Maarit, V., "Integrating the IS Personnel After a Merger – Managing Challenges and Opportunities"

resignations of key people, performance decreases and lowered productivity, incentive problems, lowered commitment, increased absenteeism, dysfunctional behaviour or even sabotage.

The psychological setup is very important for the preparation of the integration process and represents a stage where understanding the mindsets that people come with into the new organizational frame and the ones they develop during the integration is crucial. This phase aims at raising people's awareness and ability to react to the normal development and expected stress that comes with the integration process.[64]

There are also different attitudes to the merger from the acquirer's and the target's point of view meaning that integration means "different things to different people". Usually, the buyer tends to have a leading attitude, especially when the acquired company has had financial problems and is in need for cash, and especially if the merger was initially intended as a "merger between equals", these differences in attitude can have a negative impact on the relationship. The example of the AOL – Netscape integration is very representative for this issue, as the whole process was slowed down by Netscape's self perception of technical superiority on the one side and by AOL's belief that they had fixed problems Netscape was dealing with long before on the other side.[65] Therefore, the awareness of the different attitudes and mindsets, both the buyer's and the target's, can help both sides to build a basis for a successful integration.

Mindset of the buyer

As soon as the deal was closed, the acquiring companies are subject of the urgency of consolidating their profits. Sometimes, the management board from the acquirer's side tends to dominate the activities and move too fast compared to their previously established plans, while the management of the acquired company is still expecting the steady, traditional way of approaching things that was promised during negotiations. Pushed by strong financial incentives when

[64] Marks, M.L., Mirvis,P.H., "Making Mergers and Acquisitions Work: Strategic and Psychological Preparation", Academy of Management Executive, 2001, Vol. 15, No. 2, pp. 80 – 94

[65] Idem 40

meeting budgets and achieving targets, the executives "get the taste of power" and tend to use their own integration plans.

Mindset of the seller

John Handy[66], an executive recruiter, studied over one thousand senior and middle executives from acquired companies and found out that 90% of them were psychologically unprepared for all the changes in the organizational structure that occurred during the integration phase. Even in mergers between equals, the possibility of a status change made managers retreat into a defensive action, trying to hold on to what they had built until the merger. Seeing the management anxious, the employees start feeling incertitude about their own jobs and even anger against the merger partner. This incertitude might lead to the fact that some employees will have a hard time accepting the merger or even to valuable employees leaving the company.[67],[68]

Buono and Bowditch[69] emphasized the important of the different human resources approaches after a merger or acquisition and identified on the one side what they call the typical approaches and on the other side, the recommended approaches that are expected to lead to more positive outcomes:

	Typical approach	**Recommended approach**
COMPETING CLAIMS	• Limited View • Stockholder emphasis • Cultural takeover	• Broader View • Stakeholder emphasis • Cultural Pluralism and cultural blending
SECRECY versus DECEPTION	• Controlled release of information • Use of information to manipulate employees • One-way Communication	• Realistic merger previews • Presentations, workshops, hotlines • Two-way Communication
COERSION versus PARTICIPATION	• Autocratic decision making • Cultural takeover • "Do it or else" attitude • Limited efforts to work through employee grief	• Transition teams and team building • Merger oversight structures • Survey feedback • Focused efforts to counsel employees

[66] Handy, J., "How to Face Being Taken Over", Harvard Business Review, November – December 1969

[67] Cartwright, S., Cooper, C. L., "Of Mergers, Marriage and Divorce", Journal of Managerial Psychology, 8 (6), 1993, pp. 7-10

[68] Schweiger, D. M., Weber, Y., "Strategies for Managing Human Resources During Mergers and Acquisitions: An Empirical Investigation. Human Resource Planning", 12 (2), 1989, pp. 69-86

[69] Buono, A.F., Bowditch, J.L., "Ethical Considerations in Merger and Acquisition Management: A Human Resource Perspective", S.A.M. Advanced Management Journal, 55 (4), 1990, pp. 18 – 23

GRIEF, LOSS and TERMINATION	• Terminations based on organizational politics rather than performance • Limited outplacement assistance • No support for stayers • Low: utilitarian focus on "greater good" overrides concern for individuals	• Merger-related workshops • Reduction in force through attrition and voluntary separation • Supportive outplacement assistance • High: balance between questions of fairness and individual rights and broader company/ stockholder/ stakeholder needs

Table 4: Typical vs. Recommended Human Resources Approaches in the PMI process
Source: Human resource considerations in mergers and acquisitions (Buono & Bowditch 1990)

Schweiger and Lippert[70] suggest further several issues that require attention when integrating personnel after a merger:

1. *Creation of an integration transition structure*

After the deal was closed, it is important to create an integration team that focuses on capturing and using valuable knowledge from the combining organizations, ensuring that key personnel is retained and motivated.

2. *Articulation of integration guiding principles*

The management team should develop a set of guiding principles to ensure that the basic philosophy of the merger is understood by all employees and that decisions are made accordingly. Generally, most guiding principles address the following issues:

- the staff involvement from both companies in the integration process
- how employees will be treated with regards to selection and retention
- how the M&A integration process will be managed
- the focus of the integration effort
- the focus on customers
- the focus on strategic priorities

[70] Schweiger, D.M., Lippert R.T., "Integration. The Critical Link in M&A Creation", published in „Mergers and Acquisitions. Managing Culture and Human Resources", edited by Stahl, G.K., Mendenhall, M.E., Stanford University Press, 2005

3. *Managing communication with all stakeholders*

Communication represents one of the most crucial activities that have to be performed during an integration process. Communicating with stakeholders must begin from the moment when rumors about a merger start to appear, to avoid uncertainty and possible negative reactions. One way of dealing with the psychological issues of integration is by organizing seminars to educate the employees, where they can express their expectations and fears through an open dialogue or through books, articles and newsletter circulating within the entire organization presenting both sides of the merger. Workshops are also popular, where integration issues are discussed and simulation programs take place in order to raise both sides' awareness about the integration.

Schweiger and Lippert developed a set of five essential elements leading to successful communication:

- Establish a communication philosophy.

  This will guide management into implementation. Credibility plays an important role here, the management team having to respect their promises in order to achieve retention of key people and gain commitment for the execution of complex changes.

- Be timely and relevant.

  Communication should start as soon as possible and focus on what people need to know.

- Understand what people want to hear.

  In general, even though employees care about the growth of the company and the strategic development, they are more concerned about what will happen to them, about job compensations.. etc. Information about these issues is critical.

- Choose effective communication media.

  The most effective way to communicate with employees is through direct contact, through face-to-face communication. However, it is often difficult to do that, therefore other instruments can be used, such as videotapes, Intranet sites, emails, company newsletter, integration newsletters, bulletin boards, brochures, training sessions, employee assistance programs… etc.

- Develop and execute a communication plan.

  Such a plan would ensure that the target employees are reached at the right time, with the right information, through the most efficient media.

4. *Building teams and work units*

It is essential to ensure that people work together and are focused on the same financial and strategic objectives. This alignment has to start with the management levels, to provide a positive example throughout the organization. It is particularly challenging to create groups of people that have previously never worked together. Most companies implement nowadays team-building exercises built around task activities, such as setting goals for work units or team process activities like defining roles and activities.

5. *Developing capable and motivated people*

No matter how capable people are, without a proper training, role communication and strong motivation, they will not perform according to their potential. Executives must ensure therefore that employees receive an appropriate training for the roles they are supposed to assume in the new organization and that they are sufficiently motivated.

6. *Managing staffing, retention and redundancy*

All M&As are confronted with decisions regarding the employees' fate, such as selecting personnel, retaining key staff and layoffs. These decisions are not easy to make, but should be managed by all means with fairness, respect and compassion. Failing to do so might lead to departure of key people, bad morale and negative feelings that could affect the work environment.

As a conclusion, it is clearly how important HR practices are during the value creation process. Failure in implementing the right procedures to integrate new acquired employees may lead to unexpected problems such as loosing key people, animosity, refusal to cooperate or even boycott, which cold threaten the merger strategy. And as Larsson and Finkelstein concluded, "***the greater the employee resistance, the less the synergy realization***".

2.3. Conclusions of Chapter 2

We have analyzed the post merger integration process based on Larsson's and Finkelstein's model, which suggests that synergy realization depends on the combination potential, organizational integration and human resources management considerations. As we have seen, all these three dimensions are highly analyzed and supported by a wide M&A literature.

Part B of this master thesis will test Larsson's and Finkelstein's model by analyzing the integration strategies of one of the most important acquirers nowadays in the electric technology industry, the Danaher Corporation, which over the last two decades has done an excellent job integrating its over 400 purchases and creating valuable synergies.

PART B

CHAPTER 3: Case Study – Introduction to the Danaher Corporation

Structure of the chapter:
• The Danaher Corporation • Vision • Operating Platforms • Code of Conduct

3.1. The Danaher Corporation

DANAHER CORPORATION, first known as DMG was founded in 1969 as a Massachusetts real estate investment trust Inc. The name was changed to Danaher Corporation in 1984, and they were reincorporated as a Delaware corporation following the 1986 annual meeting of the shareholders.

Founded	Washington, D.C. (1969)
Headquarters	Washington, D.C.
State of incorporation	Delaware
Company Type	Public (NYSE: DHR)
Key people	H. Lawrence Culp, Jr., CEO & President Steven M. Rales, Chairman of the Board Daniel L. Comas, CFO
2008 Sales (mil.)	$12,697.456
2008 Net Income (mil.)	$1,317.0
Employees	50,300 (December 31, 2008)
Slogan	Invent.
Website	www.danaher.com

Table 5: Danaher Facts and Figures
Source: www.danaher.com

Danaher Corporation provides design, manufacture, service and marketing of medical, industrial, consumer and professional products, having four operating segments such as Professional Instrumentation, Industrial Technologies, Medical Technologies and the Tools and Components.

Danaher's name derives from "*dana*", the Celtic word for "swiftflowing" and the two founders, the brothers Steven and Mitchell Rales, conceived the idea of the company during a fishing trip on the Danaher, a tributary to the south fork of the Flat Head River in western Montana.[71] Today, Danaher Corporation is one of the fastest-growing companies in the industry, with revenues increasing at a

[71] Danaher Corporation website, www.danaher.com, accessed on 19th of Mai 2009

compound annual rate of 18.5 percent for the past decade. This growth however, has not been achieved at the expense of margin, the company having actually doubled its operating margin since the 1990s. The Rales brothers still hold approximately 20% of the stock.[72]

2008 financial highlights:
✓ Revenues of $12.7 billion ✓ $1.6 billion of free cash flow ✓ 17th consecutive year in which free cash flow exceeded net income ✓ 17 new companies and product lines

Table 6: "Danaher Financial Highlights 2008"
Source: Company Materials

During the last few years, Danaher significantly expanded its global presence, growing from an U.S. company into a global corporate, with more than half of its revenues derived from outside of the USA. At the moment, Danaher has more than 200 manufacturing facilities in over 20 countries around the world, with approximately half located outside of the U.S. In addition, Danaher has sales presence in more than 125 countries, comprising a total of 50.300 employees.

Core Values
✓ The Best Team Wins. Winning is fun! ✓ Associates are our most valued assets. ✓ We're passionate about retaining, developing and recruiting the best talent available. We are team-oriented with involvement by all. ✓ We are accountable for results, and we deliver. ✓ We have high integrity and respect for others. ✓ Customers Talk, We Listen We base our strategic plan on the Voice-of-the-Customer . ✓ Quality First, ALWAYS! ✓ The Danaher Business System IS our culture. Continuous Improvement (Kaizen) is Our Way of Life

Table 6: "Danaher Core Values"
Source: Company Materials

Danaher's global presence was mostly achieved through acquisitions, the company's core strategy being ***"Acquire, Integrate, Grow"***. In 2008, 14% of Danaher's total annual revenues were achieved through acquisitions. The previous year, in 2007, Danaher acquired 12 businesses for an aggregate purchase price of $3.6 billion, the most important being that of Tektronix, Inc., which is a supplier of test and monitoring equipment and creates $1.1 billion in annual sales.

[72] DHR Ceo Larry Culp Discusses European Opportunities with FAZ, a Leading German Financial Newspaper, http://www.danaher.com/news/feature_detail.asp?key=15

3.2. Danaher Vision

Over a period of 20 years, Danaher Corporation has returned a remarkable 25% to shareholders annually, far better than General Electric (16%), Berkshire Hathaway (21%), or the Standard & Poor's 500-stock index (12%)[73]. Their vision is to make continuous steps towards becoming a Premier Global Enterprise.[74] They chose to be major players in the markets they operate, expanding globally very fast, especially through mergers and acquisitions, with about half of their revenues generated outside the United States, up from 30% just five years ago.

Danaher intends to grow, but the real desire is to be strong. Their highest priority is bolt-on acquisitions that can strengthen the existing businesses. Entering into adjacent markets is a second priority; transactions that establish new platforms are a third option.[75]

3.3. Danaher's Operating Platforms, created through Acquisitions

The 4 operational platforms of Danaher were developed and intensified during the years following strategic mergers and acquisitions. Although unknown by the large public, Danaher became a leading player in the markets it accessed through its strategic acquisitions.

Year	Number of companies acquired	Total price (including transaction costs and net of cash acquired)
2008	17	$423 million
2007	12	$3.6 billion
2006	11	$2.7 billion

Table 7: Acquisitions Between 2006-2008
Source: Created after Company Materials

[73] "A Dynamo Called Danaher", The Business Week, February 19, 2007, http://www.businessweek.com/magazine/content/07_08/b4022065.htm?chan=search
[74] www.danaher.com
[75] Danaher Annual Report 2004

In Germany for instance, Danaher has acquired around 20 mid - sized companies, which together realize more than a billion in sales. Even though the company's name is known only to investors, the corporation owns companies very popular to industrial customers, such as the environmental technology manufacturer Hach Lange or the optics manufacturer Leica Microsystems. These achievements are all the more amazing, as fewer than 50 employees are sitting in a rented office on the twelfth floor of a nondescript Washington glass office building controlling a corporate empire with a workforce of 50,300. The corporate functions represented in the headquarters include finance, accounting, legal, tax, treasury, HR and M&A deal making.[76]

Annex number 4 - 7 show the growth percentage for each of the four operating segments which was achieved during the last 2 years due to M&As.

Platform 1: Professional Instrumentation

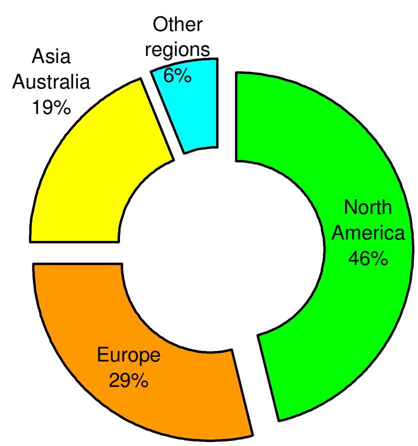

Fig. 4: "Professional Instrumentation Sales in 2008 by Geographic Destination"
Source: Danaher Corp., Annual Report 2008

The Professional Instrumentation segment offers to professional and technical customers various products and services which are meant to improve their performance within their work environment. This particular segment encompasses two strategic lines of business: environmental and test and measurement.

[76] Anand, B., Collis, D.J., Hood, S., "Danaher Corporation", Harvard Business School, July 2008

Platform 2: Medical Technologies

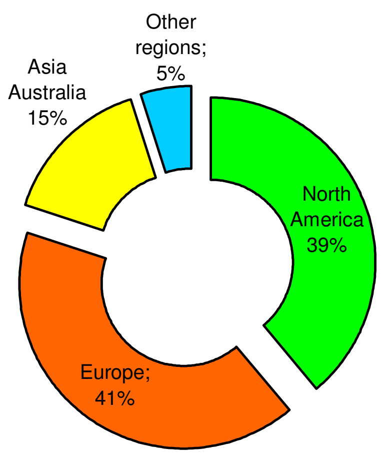

Fig. 5: "Medical Technologies Sales in 2008 by Geographic Destination"
Source: Danaher Corp., Annual Report 2008

Through this operational segment, Danaher Corp. offers products and serviced designed for research and clinical medical professionals. This line of business was added in 2004 through the acquisitions of Kaltenbach & Voigt GmbH & Co KG (KaVo), Gendex, and Radiometer A/S.

Platform 3: Industrial Technologies

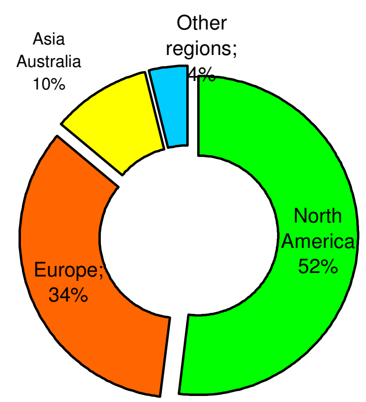

Fig. 6: "Industrial Technologies Sales in 2008 by Geographic Destination"
Source: Danaher Corp., Annual Report 2008

The Danaher companies from the Industrial Technologies segment manufacture products that are typically incorporated by customers into production and packaging lines, as well as incorporated by original equipment manufacturers into various end-products. Many of these companies also provide services to support their products, including helping customers integrate and install the products and helping ensure product uptime.

Platform 4: Tools & Components

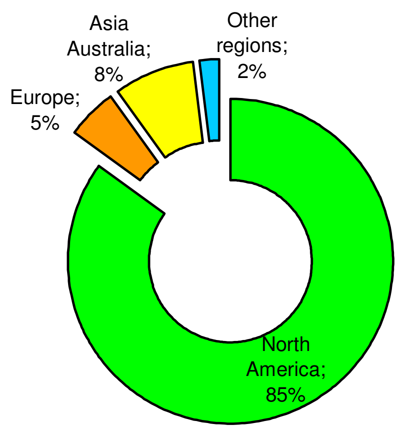

Fig. 7: "Tools & Components Sales in 2008 by Geographic Destination"
Source: Danaher Corp., Annual Report 2008

The Tools & Components segment encompasses one strategic line of business, mechanics' hand tools, and four focused niche businesses: Delta Consolidated Industries, Hennessy Industries, Jacobs Chuck Manufacturing Company and Jacobs Vehicle Systems.

3.4. Code of Business Conduct and Ethics

Of the values that form an organization's culture, ethical values and integrity issues are now considered among the most important. The standards for ethical or socially responsible conduct have to be embodied within each employee as well as within the organization itself. For this purpose, Danaher has adopted a code of business conduct and ethics for directors, officers (including Danaher's principal executive officer, principal financial officer and principal accounting officer) and employees, known as the Standards of Conduct. This Code of Conduct has to be respected by all companies belonging to the concern and by each employee.

The basic structure of the Code of Ethics is composed of roles that predefine behavioral expectations, duties and responsibilities for all employees. Shared organizational goals impose a need for uniformity, coherence and integration. The Standards can be divided into two categories – the first one with regulations directed at companies' behavior on the international market and the second category directed at employees' behavior within the organization. The first category includes regulations about **unfair competition** (meant to avoid illegal practices such as price fixing agreements with the competition or controlling prices at which distributors and other customers sell their products), **foreign corrupt** practices (prohibition of bribing to influence decisions), **political activities and contributions** (it is forbidden to use corporate funds for legislative activities), **unfair and deceptive trade practices, the environment** (compliance with all applicable environmental laws, minimizing any adverse impacts on the environment) or **money laundering prevention.**

The category dealing with co-workers contains a set of rules regarding **equal employment opportunities** (non-discriminatory criteria, without regard to race, gender, sexual orientation, color, age, national origin, physical or mental disability, religion…etc.), **harassment** (Danaher does not tolerate harassment in the workplace or in any situation that is work related based on race, color, gender, sexual origin, religion, disability, age… etc.), **fair dealing with customers, suppliers and competitors, proper use of Danaher assets, corporate opportunity** (all associates have the duty to advance the legitimate interests of Danaher when the opportunity arises), **conflicts of interests** (any activity, relationship or investment, by the employee or a member of his/her family, which could improperly conflict with his/her duties to Danaher or adversely affect his/her judgment, objectivity or job performance) or **confidentiality agreements**.

During the integration process, each manager of the new acquired firm is responsible for ensuring the distribution of the Code of Standards to each employee and for assisting them in understanding it. Further, each employee is responsible for complying with these Standards. Any violations of the Standards have to be reported, Danaher ensuring several channels for this purpose: manager or supervisor, levels of management above the supervisor, Danaher internal audit staff, Danaher's legal department, any Danaher corporate officer, Danaher's Board of Directors or Audit Committee or the Danaher Hotline, available 24 hours a day.[77]

Now, that we have seen who the Danaher Corporation is and had a glimpse into their operations, let us have a deeper look at their post acquisition integration strategies.

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[77] Danaher Standards of Conduct, Revised December 4, 2006

CHAPTER 4: Case Study –
Danaher's Post Acquisition Integration Strategy

Structure of the chapter:

- Strategic Combination
  - Types of Acquisitions
- Organizational Integration
  - Danaher Business System
  - Approach to Cultural Dimensions
  - IT Systems Integration
  - Performance Tools
- HRM considerations
  - Restructuring
  - Communication
  - Payment Schemes
  - Training Programs

As previously seen, the Danaher Corporation owes its success to a major extent to its M&A policy. Constant growth is driven through a thorough integration plan of companies, in order to extend their reach, leverage their capabilities and advance the product offering. The integration plan formulation and development begins during the due diligence phase of the acquisition and is concluded within 12 months of the acquisition. This includes personnel reductions and facility closures or restructurings, and the implementation of the *Danaher Business System* (DBS), a system of values and continuous improvement processes that apply to all parts of the organization. Danaher uses a disciplined approach for the acquisition integration, regardless of changing economic conditions, striving to implement a rigorous set of criteria that begins with an understanding of the market potential, how the DBS can be implemented, and ultimately how the organization and its customers can win.

Danaher Integration System embodies 4 P's – people, plan, process and performance.[78] These four elements are rigorously implemented in the new acquired companies by an Integration Team, created with the sole purpose of executing the integration process. A full-time leader is assigned, the Danaher Integration Manager, and the team includes both members from the acquiring and the acquired companies. We will analyze further the corporation's integration strategy according to **Larsson's and Finkelstein's model**.

[78] Anand, B., Collis, D.J., Hood, S., "Danaher Corporation", Harvard Business School, July 2008

4.1. Strategic Combination

The numerous acquisitions from the past years were performed to complement or extend existing units of the Professional Instrumentation, Medical Technologies, Industrial Technologies or Tools & Components segments. During this period, the company has transformed its structure "as it has built global platforms with leading positions in attractive markets, creating potential for organic growth". With acquisitions such as Fluke in Electronic Test, Danaher has moved its portfolio's emphasis away from its tools and components history and has refocused on mid-technology businesses in fragmented markets with high-growth potential. [79]

Prior to the acquisition decision, Danaher screened the industries according to clearly established criteria. In an interview with Janney Montgomery Scott's analyst, James C. Lucas, Danaher's CEO, H. Lawrence Culp, Jr., divulged the selection system of target companies: "First, the market size should exceed $1 billion. Second, core market growth should be at least 5% - 7% and without undue cyclicality and volatility. This excludes Rust Belt and Silicon Valley businesses for us. Third, we look for fragmented industries with a long tail of participants that have $25 - $100 million in sales, and that can be acquired for their products without necessarily needing their overheads. Fourth, we try to avoid outstanding competitors such as Toyota or Microsoft. Fifth, the target arena should present a good opportunity for applying the Danaher Business System so that we can leverage our Danaher skill sets. Last, we look for tangible product-centric businesses. This rules out for example, financial services. Broadly, this set of criteria is rooted in a simple premise: we look for markets of size where we can win."[80]

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[79] "2009 U.S. Top Picks. Macro Outlooks and Stock Picks for the Coming Year", Barclays Capital, Equity Research, December 2008

[80] James C. Lucas's Report, "Danaher Corporation: Buy; Kaizen and the Art of Value Creation", Janney Montgomery Scott, February 22, 2006

Danaher's numerous acquisitions achieved a vast geographical diversity which confers operational stability, by providing diverse revenue streams to help offset economic trends in individual countries.

Furthermore, the global presence of their sales units and manufacturing facilities facilitates their access to new products for their portfolio of products and services. Besides, Danaher plans its future growth according to their ability to develop products and sales models that target developing economies.

According to internal statistics, the company's core revenues grew substantially in the emerging markets, which now represent approximately 15% of Danaher's sales. Annex number 11 in the appendix shows the Company Revenues from Emerging Markets in 2007.

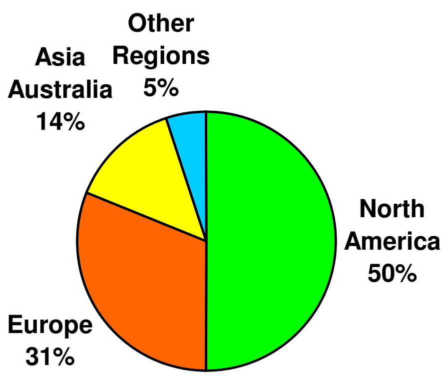

Fig. 8: "Sales by Geographical Destination", Source: Danaher Corp., Annual Report 2008

The scholars often underline in their studies the importance of global workforce. Danaher successfully integrates global skills through its geographical diversity, pursuing benefits derived from both, the existence of intelligence capital within the companies acquired and low cost manufacturing regions.

Over the past five years, Danaher has significantly expanded their global workforce, which comprises 50,300 associates in the present, half of whom are from outside the U.S.

Generally speaking, Danaher's M&A strategy followed three criteria[81]:

- **Creation of New Platforms**: As previously mentioned, the acquisition of new platforms represents a major expansion strategy for the Danaher concern. Following these strategic steps, by acquiring either a division of

[81] Anand, B., Collis, D.J., Hood, S., "Danaher Corporation", Harvard Business School, July 2008

another large corporation, a stand-alone public firm or a private company, its portfolio stretches now into new markets and products. For example, Danaher expanded recently into the medical sector, investing by 2006 "over 2,6 billion in acquisitions with a focus on building the Medical Technologies platform, which is now approaching 25% of total revenues and is reported as a segment".[82]

- **Bolt-Ons**: The Bolt-Ons represent smaller transactions, where the corporation pursued synergies between existing businesses and new targets, integrating them entirely into the core business in terms of organization, management and distribution. They represent the most frequent expanding strategy of entering new business areas. Danaher acquired in 2007 for example several product lines from Harris Corporation, integrating them into the Electronic Test Platform.

- **Adjacencies**: As opposed to the bolt-ons, the adjacencies intended to function as stand-alone units after the acquisition, even if they were interconnected with particular platforms. In 2004, Danaher bought for example Trojan Technologies, and even if they operated within the Environmental platform, their products represented a niche and the operations continued even after the acquisition to function as a distinct organization.

In connection with its acquisitions, Danaher assesses and formulates a plan related to the future integration of the acquired entity. This process begins during the due diligence process and is concluded within twelve months of the acquisition.[83] This plan is created following the two questions: "What game are we playing" and "How do we win?". Even though a strategic plan is formulated during the due-diligence process, Culp affirmed in an interview that "it was only *after* the deal was completed, and the bankers and lawyers are out of the room, that we can have an honest strategic conversation with management. At that point, we throw out the 180-page strategy manuals and create a plan for the new acquisition that is due

[82] Danaher Annual Report 2006, www.danaher.com/investors/annualreports.htm
[83] www.danaher.com

within 100 days of purchase that is intended to produce a shared long-term vision. No sacred cows are left unchallenged, and our due-diligence findings are shared with the company." Usually, the Danaher team involved in this process includes the CEO, the Executive Vice Presidents of the segment, the Head of HR, Chief Financial Officer and two members of the M&A deal team.[84]

It is of great importance that during the planning phase, the following issues are in the center of attention:

- Keep **focus** on the business main principles and on the essential factors determining success
- **Innovation**: not everything can be anticipated, therefore innovation in management decisions and operation approaches represent an advantage.
- **Discipline**: the integration process has to be seen like a battle. It is of crucial importance to have detailed plans for the entire integration execution process (what, who, when, where, how long.. etc.). Danaher uses the 100-day deadline technique, where after 3 months, a critical evaluation is undertaken.

It is obvious that Danaher takes advantage of both combination alternatives mentioned by Larsson and Finkelstein in their model, exploiting combination potential with regards to the degree of relatedness through Bolt-Ons and Adjacencies and preying complementary synergy sources, such as different products, know how or market access that fit one another through the Creation of New Platforms.

Now let us have a look at the other integration dimensions.

[84] Anand, B., Collis, D.J., Hood, S., "Danaher Corporation", Harvard Business School, July 2008

4.2. Organizational Integration

We continue now by analyzing the second dimension of Larsson and Finkelstein's model, that is the organizational integration.

We have seen that depending on the strategy they pursue with a specific combination, Danaher engages in creations of new platforms, bolt-ons or adjacencies. Each type of acquisition determines a certain level of influence that the corporation uses upon the new organization. Bolt-ons are entirely absorbed, whereas companies that serve to the creation of new platforms keep a certain degree of autonomy. However, no matter how high the degree of assimilation, the implementation of the ***Danaher Business System*** is always on the integration agenda.

4.2.1. But What is the Danaher Business System (DBS)?

After seeing how many acquisitions Danaher has performed in the past few years, and more important, how successfully the new companies were integrated into the core business of the corporation, one can easily affirm that Danaher has a very effective integration strategy. So what are the key factors determining Danaher's successful post M&A integration, ensuring that the new added entities create value for the company?

First of all, the mind setting of the corporation is to **acquire, integrate and grow**. This mindset already establishes a strong foundation for the integration procedures, ensuring that all efforts are focused on a thorough and attentively performed integration phase.

The Danaher post M&A integration strategy has proven to be successful along too many years to consider it a coincidence. This success can be rather attributed to the Danaher Business System (DBS), a proven system that drives every aspect of their culture and performance. "We use DBS to guide what we do, measure how well we execute, and create options for doing even better -- including improving DBS itself."[85]

Representing a standardized global operation process today, the DBS is applied in every operating unit and at every level of the corporation. The history of the Danaher Business System goes back into the 1980s. Danaher was facing increasing competition, so they tried to differentiate themselves from other competitors by introducing an improvement system based on the then new principles of lean manufacturing.[86] These new improvement efforts proved to be more successful than anybody was expecting it, setting the foundations for the DBS. Since then, "DBS has evolved from a collection of manufacturing improvement tools into a philosophy, set of values, and series of management processes that collectively define who we are and how we do what we do".[87]

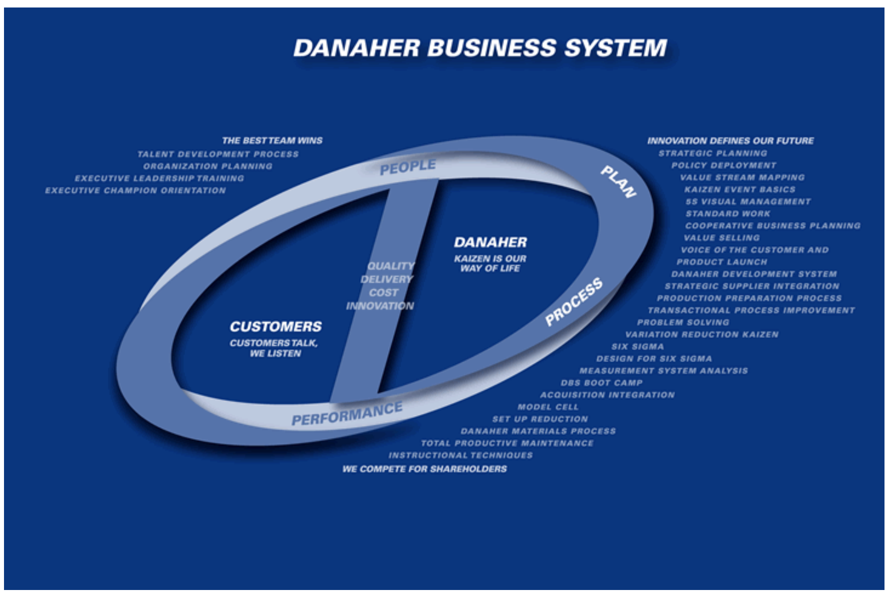

Fig. 9: "The Danaher Business System"
Source: www.danaher.com

Standing on the core values pillars of the concern, the DBS sets the frames for continuous change and improvement, by encouraging its employees to develop exceptional plans and execute them using outstanding tools in order to create sustainable processes that lead to superior performance. The entire DBS

[85] Hach Lange, a company belonging to the Danaher Corporation, http://www.hach.com/hc/static.template/templateName=HcCorporate.HcHachDanaher.htm, accessed on June 2, 2009
[86] Danaher Annual Report 2002
[87] http://www.danaher.com/about/businesssystem.htm, accessed on June 2, 2009

philosophy is based on four customer-facing priorities: ***Quality, Delivery, Cost***, and ***Innovation***[88] and is applied to all parts of the organization.

Based on a lean manufacturing initiative and the Japanese concept of "*Kaizen*", or continuous improvement, the DBS is what allows Danaher to acquire companies and make them more and more efficient. Immediately after being acquired by Danaher, the Hach Lange[89] team for example underwent an integration process, which included crafting a new market-driven strategic plan consistent with the Danaher Business System methodology. They tore apart their bread-and-butter multimeter assembly line and rebuilt it, using just-in-time manufacturing principals, with phenomenal results.

The DBS intended originally to imitate the extremely successful **Toyota Production System (TPS)**, which revolutionized productivity at the Japanese car company, a system based on the lean manufacturing process, it has however evolved into "something far more comprehensive, a process encompassing not just production but also strategic planning, employee training, customer service and product development—in short, the entire business."[90]

The DBS has developed however from the 4 basic principles of the TPS, a dynamic system following strict rules for activities and production. However, strict not in the sense of inflexible; within this system, it is exactly the strict indications that facilitate an adaptable system. Here are the four principles[91]:

1: Standardization –

All work shall be highly specified as to content, sequence, timing and outcome

The main rule of the Toyota Production System is that all operations have to follow strict rules regarding timing, content and outcome. Larger operations are

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[88] Danaher Materials

[89] Hach Company, seated in Colorado, part of the Danaher Concern since 1999, merged with Dr. Bruno Lange GmbH & Co. KG seated in Berlin in 2001

[90] Interview with Larry Culp, CEO of Danaher, "A Philosophical Approach to High Performance", Accenture 2006, http://www.accenture.com/Global/Research_and_Insights/Outlook/By_Subject/High_Performance_Business/APerformance.htm

[91] Adapted after Spear, S., Bowen, H.K., "Decoding the DNA of the Toyota Production System", Harvard Business Review, September – October 1999 and Moore, R., "Selecting the Right Manufacturing Improvement Tools", Butterworth Heinemann, 2007, p.152

divided into fractions, where every activity is predefined. By comparing the desired results with the actual outcome, the deviations can easily be traced out and the errors removed. Thus, standardization reduces outcome variations and improves quality.

2: Communication –

Every customer-supplier connection must be direct, and there must be an unambiguous yes-or-no way to send requests and receive responses

The second principle settles the frame for integrating individual activities, mentioning that communications have to be clearly defined and standardized as well.

3: Simple and direct flow –

The pathway for every product and service must be simple and direct

The third principle specifies that every product has to follow the simple and specified path. This enables experimentation every time the product flows.

4: Continuous Improvement –

Any improvement must be made in accordance with the scientific method under the guidance of a teacher, at the lowest possible level in the organization

In all product pathways, improvement must be made at the lowest level of organization under strict supervision. "The frontline workers make the improvement and the supervisors provide assistance and direction. Problem solving and continuous learning occurs at all levels of the organization."

The following table gives us an overview on how solutions are found based on the above mentioned principles:

Rule	Hypotheses	Signs of a problem	Responses
1	The person or machine can do the activity as specified.	The activity is not done as specified.	Determine the true skill level of the person or the true capability of the machine and train or modify as appropriate.
	If the activity is done as specified, the good or service will be defect free.	The outcome is defective.	Modify the design activity.

2	Customers' requests will be for goods and services in a specific mix and volume. The supplier can respond to customers' requests.		Responses don't keep pace with requests. The supplier is idle, waiting for requests.		Determine the true mix and volume of demand and the true capability of the supplier; retrain, modify activities, or reassign customer-supplier pairs as appropriate.
3	Every supplier that is connected to the flow path is required. Any supplier not connected to the flow path is not needed.		A person or machine is not actually needed. A non-specified supplier provides an intermediate good or service.		Determine why the supplier was unnecessary and redesign the flow path. Learn why the non-specified supplier was actually required and redesign the flow path.
4	A specific change in an activity connection, or flow path will improve cost, quality, lead time, batch size or safety by a specific amount.		The actual result is different from the expected result.		Learn how the activity was actually performed or the connection or flow path was actually operated. Determine the true effects of the change. Redesign the change.

Table 8: "The Experiments of the Toyota Production System"
Source: Spear, S., Bowen, H.K., "Decoding the DNA of the Toyota Production System", Harvard Business Review, September – October 1999

Basically, the TPS aims at creating an output that:

- is defect free
- can be delivered one request at a time
- can be supplied on demand in the version requested
- can be delivered immediately
- can be produced without wasting any materials, labour, energy or other resources
- can be produced in a work environment that is safe physically, emotionally and professionally for every employee

The Danaher Business System is exactly a set of management tools borrowed directly from the famous Toyota Production System. In essence, it requires every employee, from the bodyguard to the CEO, to find every day new ways to improve the way operations take place. Similar quality-improvement programs and lean manufacturing methods have actually been a focus for producers for years, the difference at Danaher however is that by starting applying lean management 1987, it was one of the first U.S. companies to do so, and "it has maintained a cultish devotion to making it pay off." [92]

The DBS operates on two levels[93]: the first one is the level of the daily management, where *kaizen* principles are applied and complex tools, such as Six Sigma and Valuestream Mapping Techniques are implemented, having as targets eliminating excess inventory, unnecessary waiting times, overproduction and quality defects.

DANAHER BUSINESS SYSTEM	
DAILY MANAGEMENT	HOSHIN KANRI (POLICY DEPLOYMENT)
- Kaizen principles - Lean Management - Six Sigma - Ideas to Execution (I2E) - Voice of Customer (VOC)	

Table 9: Structure of the DBS
Source: Adapted from Company Materials

The second level however is the one that differentiates the DBS from other systems. At this level, *Hoshin Kanri*, or policy deployment, is the one setting aggressive targets across the whole corporation, "usually limited to a few each year and typically related to a product line or geographic expansion—into China, for example." These goals are set by the senior management and then communicated to all employees. The company uses then the so called "tracking boards" to register the progress made. These "tracking boards" are applied after each production unit in every manufacturing facility of Danaher.

As Mr. Culp himself said in an interview with *Outlook* Industry Editor Wendy Cooper[94], the DBS "defines our culture and who we are, as much as it defines

[92] "A Dynamo Called Danaher", The Business Week, February 19, 2007, http://www.businessweek.com/magazine/content/07_08/b4022065.htm?chan=search
[93] Idem 4
[94] http://www.danaher.com/pdf/feature_accenture_2006.pdf

how we do what we do—our day-to-day approach to the business. Having a systematic approach to both the soft side and the hard side of the business, an approach where one feeds off the other, has been fundamental to our success."
Now let us look in detail at the principles and tools that make the DBS such a successful integration tool.[95]

a) Principles of Kaizen

The principles of *kaizen* aim at eliminating waste, standardizing processes and bringing underperforming or slow-growth companies to a superior level. The system has its roots in Japan, right after the World War II, when American occupation forces brought in American experts in statistical control methods in order to establish training programs to restore the nation. These programs included Job Instruction (standard work) and Job Methods (process improvement). Together with the Shewhart cycle (known also as the Plan-Do-Check-Act), an iterative four-step problem-solving process typically used in business process improvement, taught by W. Edwards Deming, and other statistics-based methods taught by Joseph M. Juran, these became the basis of the kaizen revolution in Japan that took place in the 1950s.[96]

"Kaizen is a process of slow, continuous, incremental change that leads, over time, to significant improvement in performance. It's a *constant* search for ways to make *existing* things better, whether you're working with systems, services, or procedures."[97] Nowadays, the Toyota Production System is world wide known for kaizen, where the entire line personnel are expected to interrupt production in case any abnormality occurs and, together with their supervisor, suggest an improvement to solve the problem. The system follows the four following steps suggested by Deming[98]:

- PLAN

[95] Adapted after Company Materials
[96] Huntzinger, J., "The Roots of Lean: Training within Industry—the origin of Kaizen", First Quarter 2002
[97] Ross, B., Segal, C., Jossey-Bass, "Breakthrough Thinking for Nonprofit Organizations – Creative Strategies for Extraordinary Results"
[98] http://en.wikipedia.org/wiki/PDCA

Establish the objectives and processes which are essential for reaching the desired outputs.

- DO

Implement the new processes.

- CHECK

Measure the new processes and compare the results against the expectations.

- ACT

Analyze the differences to determine their cause. Determine where to apply changes that will include improvement.

Here are various advantages of Kaizen[99] that prove to be extremely valuable during the post acquisition process:

- everybody in the organization is involved
- because everybody can contribute and their efforts are valued, kaizen encourages a high level of buy-in
- people are not put under pressure to come up with "the big idea"; small, incremental improvements are valued
- it has a low risk, since employees don't have to put everything else on hold to concentrate on improvement
- it has a long time frame, with no urgent deadlines to meet

By using the Kaizen methods, Danaher constantly discovers examples of waste, even in the best facilities that come with the acquired companies and within their most productive processes.[100] In spite of the excellent present performance, it still enables them to improve in the future. Just as a side comment, since the kaizen process continuously eliminates waste, under the present economic difficulties when cost reductions became necessary, Danaher didn't have to change strategies: "We simply accelerated the *kaizen* processes already in motion across Danaher. So rather than the "early" start we are given credit for, what we really enjoyed was a "running" start given our longstanding commitment to *kaizen.*"[101]

[99] Ross, B., Segal, C., Jossey-Bass, "Breakthrough Thinking for Nonprofit Organizations – Creative Strategies for Extraordinary Results"
[100] http://www.banking-business-review.com/companies/danaher_corporation
[101] Annual Reports

b) Six Sigma

Initially implemented by Motorola, Six Sigma is a management strategy which aims at improving the process quality by identifying and eliminating the causes of errors or defects. Its application is done by using statistical methods to establish any variations in manufacturing and business processes. Each Six Sigma project carried out within an organization follows a defined sequence of steps and has quantified financial targets, such as cost reduction or profit increase[102].

The entire Six Sigma tool is based on the following three basis rules[103]:

- All work occurs in a system of interconnected processes.
- Variation exists in all processes.
- Understanding and analysing the variation are keys to success.

All work is a series of interconnected processes, and identifying, characterising, quantifying, controlling and reducing variation provide opportunities for improvement.[104]

According to Motorola[105], Six Sigma has developed during the last years from a metric, to a methodology and a management system. Essentially, Six Sigma is all three at the same time.

<u>Six Sigma as a Metric:</u> The term "Sigma", meaning “Variance” in statistics, is used as a quality indicator. Using this scale, Six Sigma equates to 3.4 defects per one million opportunities (DPMO).

So we see that Six Sigma was born as a strive for defect diminution in the manufacturing process, being transferred afterwards into business processes for the same purpose.

1 sigma = 690,000 DPMO = 31% efficiency
2 sigma = 308,000 DPMO = 69.2% efficiency
3 sigma = 66,800 DPMO = 93.32% efficiency
4 sigma = 6,210 DPMO = 99.379% efficiency
5 sigma = 230 DPMO = 99.977% efficiency
6 sigma = 3.4 DPMO = 99.9997% efficiency

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102 Jiju, Antony, “Pros and Cons of Six Sigma: An Academic Perspective”, January 2008
103 Snee, R.D., “The Project Selection Process”, Quality Progress, September, pp. 78-80, 2002
104 Snee, R.D., “Statistical Thinking and its Contribution to Total Quality”, The American Statistician, Vol. 44 No. 2, pp. 116-121, 1990
105 Motorola, “FAQs: What is Six Sigma?”, http://www.motorola.com/content.jsp?globalObjectId=3088

Six Sigma as a Methodology: Six Sigma evolved from a simple metric into a business improvement methodology, putting less emphasis on the literal definition of 3.4 DPMO, but more on:

- ✓ Understanding and managing customer requirements
- ✓ Aligning key business processes to achieve those requirements
- ✓ Utilizing rigorous data analysis to minimize variation in those processes
- ✓ Driving rapid and sustainable improvement to business processes

Six Sigma as a Management System: The Six Sigma Management System is a very successful tool which is applied by Danaher during the DBS integration. Danaher ensures that process metrics and disciplined methodology are implemented into the operations of the new acquired company in order to discover improvement opportunities that are directly linked to the organizational strategy.

c) Lean Management

Lean Management represents the continuous, consequent and integrated implementation of a set of principles, methods and measures for an effective planning, development and control of the entire value-added chain of an organization. It involves as well long term strategic as well as mid term tactical and short term operative tools.[106]

We will present 7 of the various Lean Management Implementation Tools used by Danaher during the Integration Process[107]:

1. 5S

5S is methodology for efficiency improving, which helps organize and manage the workplace so that it minimizes any type of waste. The tool is derived from the Toyota Production System, and the 5 S come from the Japanese words:

[106] Pfeiffer, W., Weiss, E., "Lean Management – Grundlagen der Führung und Organisation lernender Unternehmen", 2. Auflage, Erich Schmidt Verlag, 1994, p.53
[107] Company Materials

5S	Goal	Eliminate or Correct
Seiri Sorting	Keep only what you need	Unneeded equipment, tools, furniture; unneeded items on walls, bulletins; items blocking aisles or stacked in corners; unneeded inventory, supplies, parts; safety hazards
Seiton Setting in order	A place for everything and everything in its place	Items not in their correct places; correct places not obvious; aisles, workstations, & equipment locations not indicated; items not put away immediately after use
Seiso Shining	Cleaning, and looking for ways to keep clean and organized	Floors, walls, stairs, equipment, & surfaces not lines, clean; cleaning materials not easily accessible; labels, signs broken or unclean; other cleaning problems
Seiketsu Standardizing	Maintaining and monitoring the first three categories	Necessary information not visible; standards not known; checklists missing; quantities and limits not easily recognizable; items can't be located within 30 seconds
Shitsuke Sustaining	Sticking to the rules	Number of workers without 5S training; number of daily 5S inspections not performed; number of personal items not stored; number of times job aids not available or up-to-date

Table 10: "The 5S"
Source: Russell, R., Taylor, B.W., "Operations Management: Quality and Competitiveness in a Global Environment", 5th Edition, Chapter 15

2. Autonomation

Derived from the Japanese Jidoka, when implemented, the Autonomation tool helps detecting whenever there's a quality or process problem. In these situations, the tool stops the machine automatically, removes the error and looks for a permanent solution. This tool is very helpful, as on the one hand, it stops the production process automatically, without the need of human intervention, and on the other hand it doesn't pass the defects down the line. This way, no corrections are needed, as the error is identified and corrected at its source, eliminating waste.

3. Heijunka

Derived from the Just in Time Manufacturing of the Toyota Production System, Heijunka represents production sleeking by manufacturing intermediate goods at a constant rate, to allow further processing as well at a constant and predictable rate. This tool reduces finished goods inventories and production lead time, as well as capital costs, allowing at the same time a flexible production that meets customer demands.

Example:

If there are five products that need to be manufactured according to the following demand:

Product A – 3 units/week 3

Product B – 2 units/week 2

Product C – 5 units/week 5

Product D – 2 units/week 2

With the Mass Production approach, the manufacturing pace is: AAABBCCCCCDD

Within the Lean Production, the manufacturing pace changes to: ABCCDABCCDAC

4. Kanban

This tool is also borrowed from the Toyota Production System. Toyota developed it by analyzing the way supermarkets work, supplying what is needed to the customers, at the time needed and in the amount needed. Supermarkets stock and supply only what they believe they will sell, creating the offer strictly depending on demand. Toyota applied this principle to its manufacturing facilities: production is determined by the actual demand.

Kanban means in Japanese "card" or "signboard" and the next figure shows an example of a Kanban card:

Fig. 10: Kanban Card
Source: Management Consulting, www.resourcesystemsconsulting.com

But let's see how the Kanbans are used, for example in a three-boxes system, one box in the factory, one box in the factory store and the last one at the suppliers' store. Each of these boxes has a removable kanban card like the one in the figure above, mentioning the product details. When the box from the factory gets empty, it is sent together with its kanban card to the factory store. Here, the empty box is replaced with a full box, which also contains a kanban card. The factory store contacts then the supplier and sends him the empty box, together with the kanban card. The supplier sends back a full box to the factory store, together with a kanban card, thus ensuring that the process will never run out of a product.

The real challenge here however, is calculating how many kanban cards are needed for each product. This can be done with the help of the following formula:

$$\text{Number of kanbans} = \frac{\text{average demand during lead time + safety stock}}{\text{container size}}$$

OR

$$N = \frac{dL + S}{C}$$

where

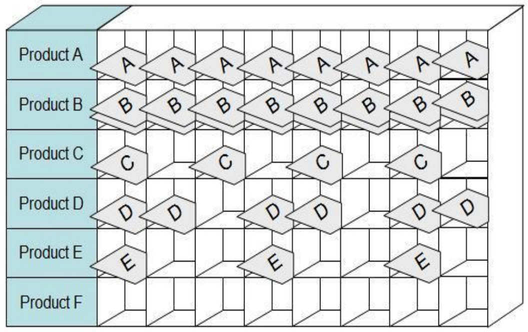
N = number of kanbans or boxes
d = average demand over a period
L = lead time to replenish an order
S = safety stock
C = container size

Example:
d = 150 bottles per hour
L = 30 minutes = 0.5 hours
S = 0.10(150 x 0.5) = 7.5
C = 25 bottles

$$N = \frac{dL + S}{C} = \frac{(150 * 0.5) + 7.5}{25} = 3.3 \text{ kanbans or boxes}$$

- Round up to 4 (to allow some slack) or down to 3 (to force improvement)[108]

[108] Example taken from Russell, R., Taylor, B.W., "Operations Management: Quality and Competitiveness in a Global Environment", 5th Edition, Chapter 15



Most Danaher factories using kanban use the coloured board system (Heijunka Box). This box consists of a board with the purpose of holding the kanban cards, as seen in Fig. 11.

Fig. 11: Heijunka Box.
Source: http://en.wikipedia.org/wiki/Heijunka_box

5. Poka Yoke

Poka yoke combines techniques that help assembly workers avoid mistakes such as installing a wrong part or installing it backwards, detecting both, human and machine errors and providing instant feedback. Limit sensors are such an example.

6. Total Productive Maintenance (TPM)

Through various techniques, Total Productive Maintenance ensures that each machine operating in a production process is always able to perform with no accidents, breakdowns or defects.

7. Value Stream Mapping (VSM)

Value Stream Mapping is a method that visually shows the product, material and information flows within a product family or service, providing the focus to drive the determined strategic actions. It pursues improvements in lead time, on-time delivery or inventory reductions.

d) Ideas to Execution (I2E)

Another tool that the new acquired companies have to embrace during the integration process is Danaher's "Ideas to Execution (I2E)" initiative. Danaher puts tremendous energy and investment into this strategy, aiming at strengthening the processes by which they conceive, develop and deliver new products to customers.[109]

Essentially, I2E is DBS for the engineers, scientists, marketers and salespeople. This strategy applies mainly the lean principles of DBS, supplementary adding with the help of benchmarking, best practices for research, development, sales and marketing that can be shared across Danaher.

A good example of the I2E implementation is the recent launch of AQT90 Flex (cardiac, coagulation, infection and pregnancy markers), Radiometer's[110] entry platform into the cardiac marker market. Cost - oriented DBS tools were used to free up funding for this ambitious undertaking, the largest R&D project in Radiometer's history. I2E tools were further used to collect customer inputs, develop and test a winning product design and deliver it in record time. Danaher began shipping AQT90 Flex early in 2007.

Another company belonging to the concern that successfully implemented I2E to systematically improve the effectiveness and efficiency of the sales teams is Hach Lange. Following those improvements, they smartly expanded their field sales capacity to drive double-digit compounded annual revenue growth over the past five years. They used for this continuous hiring models, attractive reward and recognition systems and focused training for each of its sales associates. I2E has also helped accelerate the team's successful expansion around the globe, allowing the company to take advantage of significant emerging market opportunities.

The I2E strategy is sustained by another powerful DBS tool designed to aid in the development of new products from concept to successful market commercialization, the Accelerated Product Development (APD). Radiometer used APD in the development of the above mentioned AQT90 Flex. Using a cross-functional project team, including marketing, R&D and production, Radiometer significantly reduced development time for this new product by 40%. A combination of customer visits, focus groups, surveys, advisory teams and

[109] Danaher Annual Report 2007
[110] Radiometer is a leading provider of advanced acute care testing solutions with products sold in more than 100 countries. It was acquired by Danaher in 2004

associate involvement helped Radiometer ensure that AQT90 Flex met the "voice of the customer."[111]

e) What is the Voice of the Customer (VOC)?

The Voice of the Customer is a term used to describe the process of capturing a customer's requirements and it represents the starting point for establishing priorities for the business within Danaher. The entire Danaher Business System guides everyday activities with the main purpose of exceeding customer expectations. These expectations are defined by *quality* levels, *delivery* performance, improvements in *cost* and by the ability to provide *innovative* products and services.[112] VOC has found application in product development, customer service, marketing, advertising.. etc. basically in every aspect where the business meets the customer.

As Mr. Culp said, "the customers talk, we listen", and with a deep systematic view of what customers actually need, Danaher can determine what they can do to meet and exceed clients' expectations. Very much of Danaher's success is attributed to innovation and executives have a comprehensive framework for sustaining creativity: all innovations start with the Voice of the Customer and clients' needs influence the portfolio all the way through product development and marketing. This innovative way of being close to the customer has proven to be very successful. In the case of Fluke Biomedical for instance, Danaher rapidly enhanced their competitive position in the medical quality assurance market exactly by listening to the customer. "Clients' feedback allowed Fluke Biomedical to expand into the ultrasound quality assurance segment by targeting the needs of the biomedical engineer and has helped deliver double digit annual growth in the biomedical market."[113]

Another example of the VOC is that of Raytek[114]: the company team was planning to create a low-cost thermographic tool that could be easily used by any

[111] Danaher Annual Report 2007
[112] Company Materials
[113] Danaher Annual Report 2005
[114] Raytek joined Danaher's Electronic Test and Measurement platform in 2002

maintenance professional. By carefully listening and implementing the Voice of the Customer, the development team identified an important number of key value elements that customers required from thermal imaging equipment: good resolution, the ability to scan and get an immediate temperature reading, and easy-to-use software that would help with data analysis.[115] The new product proved to be a real success.

Listening to the Voice of Customer is a systematic process, where data and ideas are collected by means of several methods:

- Directly asking the customers to rate a product feature on a certain scale (ex. Question: "How important is it or would it be if: ...?" Answers: from 1 Very important to 10 Not important at all)
- Constant-sum scale in which customers are asked to allocate 100 points among the essential features of the products, then allocate 100 points to each set of secondary needs within each primary-need group, and finally allocate 100 points among each set of tertiary needs within each secondary-need group.
- Anchored scale in which customers are asked to allocate 10 points to the most important basic feature and up to 10 points to the other basic features. Similar to the constant-sum scale method, the customers have then to allocate up to 10 points to secondary features corresponding to each primary feature and to tertiary features corresponding to each secondary feature.[116]

In addition to the classical methods, Danaher has implemented an innovative technique meant to promote and facilitate customers' creativity: Danaher Tool Group launched the "*Inventor Connect*" - a website developed to attract tool inventors and provide the chance to creative minds to submit new tool ideas for review.

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[115] Danaher Annual Report 2003

[116] Adapted after Craig, S.C., Douglas, S.P., "International Marketing Research", 2nd edition, John Wiley & Sons, 2000

"We aim to be the destination for new tool inventors globally," says Stephen Otis, Director of Product Marketing for Danaher Tool Group.[117] "We have the brands and private label customers to offer inventors the broadest possible market for their new ideas." This way, Danaher has rapid access to new, creative ideas, has a close relationship to customers and is able to react accordingly to their needs. This initiative will develop a strong inventor community base, and Danaher will efficiently use outside resources to rapidly bring ideas to market. "Some of our best innovation comes from inventors and we pay royalties for their inventions," says Otis.

Danaher Tool Group has a cross functional team who is focused exactly on putting inventors' ideas into practice and develop them into a new product. The first stage of the process begins when the outside inventors submit their idea to the Danaher team, which proceeds with the evaluation in their monthly meetings.

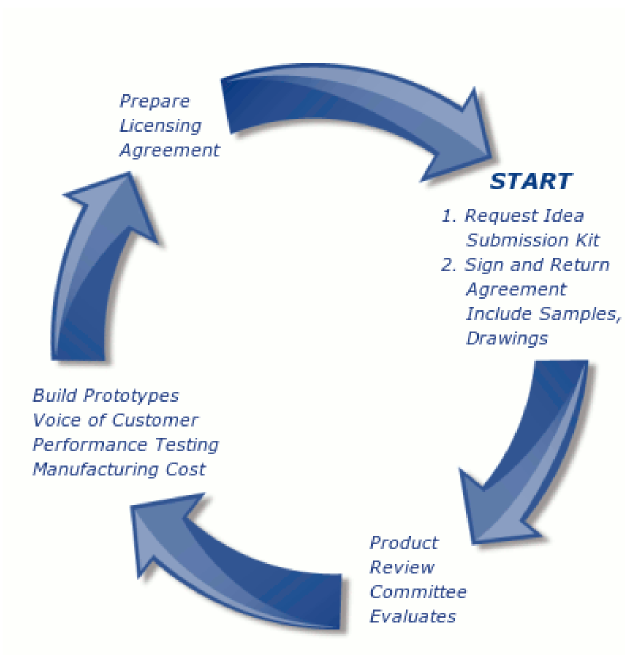


Fig. 12: Typical Inventor Process
Source: Danaher's Inventor Connect
www.newtoolinventor.com/process

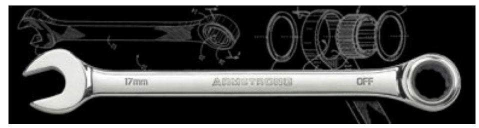
If the idea is compatible with Danaher's product roadmap and strategic vision, the project will be approved and sent further to the next stages: design and prototyping, Voice of the Customer research, product performance testing, intellectual property evaluation, and manufacturability studies.

[117] http://www.newtoolinventor.com/

After making a licensing arrangement with the inventor, Danaher compensates him/her for the idea. This process varies in duration based upon the idea, but it is possible to complete the Idea to Execution process in less than 12 months.

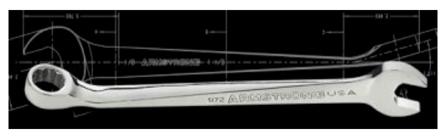
Here are some Inventor Project Examples brought to market by Danaher with the help of outside resources[118]:

Electronic Torque Wrench
Innovation:
Simple user interface with a cost effective design.
Partner:
University resources for electronics design



Heavy Duty Ratcheting Wrenches
Innovation:
Large tooth profile for maximum ratcheting reliability
Partner:
Outside Inventor

Indexing Pry Bar
Innovation:
180 degree pivoting head with push button indexing.
Partner: Outside Inventor



Ergonomic Wrench Beam
Innovation:
Tapered 90 degree beam for maximum hand contact surface area
Partner: Outside Inventor

We have discussed until now a major part of the organizational integration strategy of Danaher, which is the Danaher Business System. By integrating the DBS into all the new acquired companies, Danaher ensures a systematic business approach in all its units. Now let's have a look at other organizational aspects of the PMI.

[118] http://www.newtoolinventor.com/examples

4.2.2. Danaher’s Approach to Cultural Dimensions

During the integration process, the acquired companies adopt Danaher’s culture. So let’s have a look at how Danaher Culture is defined.

When analyzing the level of the **power distance**, one can notice that even though initiative is encouraged and desired, the hierarchy levels are extremely structured within the entire concern and the company’s policy requires to respect them. Having a global presence however and ongoing operations throughout several continents, and implicitly throughout various cultures, it is sometimes challenging to impose North American values in other countries. In Turkey for example, within the subsidiaries of the Hach Lange Company, it is often difficult to do so, as their culture respects age more than aptitudes, whereas Danaher hierarchy is based only on skills and experience. **Collectivism** is enforced in all companies belonging to the concern with possible local characteristics of individualism generally not being taken into account. Since the company has operations only in the technological industry, the majority of the employees are men, but discriminations regarding sex are definitely not made within the company. **Women have representative influence** and are represented on all managerial levels.

The concern generally **tries to avoid unexpected situations** by carefully planning everything ahead and by developing powerful controlling tools to ensure desired outputs. The **strategies are long termed** and very often projects materialize over a period of 10 years. The approach the company uses is focused on quality, products of high value, rather than on quantity. Sometimes this approach collides with local cultures, as in Romania for example, where the emphasis is rather on quantity. Danaher combats these cultural differences with very strict rules that have to be respected by all units.

According to the 6 dimensions of organization cultures, Danaher can be ranked as follows:

Process - oriented versus Results - oriented	The concern is definitely product oriented, its focus being on the final output. This product orientation is derived from the customer oriented approach of the operations and from the successfully implemented Voice of Customer (VoC) tool. One of the core values of the concern is: "Quality First, ALWAYS!"
Job - oriented versus Employee - oriented	Danaher applies a combination of both orientations, on the one side by supporting and encouraging its employees, but on the other side, attributing a lot more weigh to job orientation by focusing more on employees' outputs
Professional orientation versus Corporate orientation	Since most mergers between acquired companies and Danaher are rather new, and due to the fact that acquired firms may still keep some individuality to a certain extent, even after the integration phase, most employees still identify with their initial firm as a stand alone unit rather than with the entire concern. After the merger between HACH and LANGE in 2001 for instance and their inclusion within the corporation, former employees of the North American firm HACH still identify more with their company, whereas the Europeans, former employees of LANGE (and especially the German employees) identify more with LANGE. The executives are usually encouraged to stay longer periods of time within the company (many of them over 10 years), by offering them personal development opportunities so one can easily notice that their identification with the company is very high. High ratings of job satisfaction and commitment to the company have been registered.

Open system versus Closed system	Danaher encourages its employees to grow within the concern, thus meaning that higher positions are first offered to people already enclosed in the system; however, outsiders and new employees are easily included, trained and supported, one of the core values of the concern being *"We're passionate about retaining, developing and recruiting the best talent available."*
Severe control versus Loose control	The formality level within the acquired companies becomes very high during the integration, fact imposed by the Danaher Concern. Following the feedback received from all operation countries, an optimal Standard Operating Procedure (SOP) is developed, and once introduced, it becomes rule. Those who don't conform to the requirements are easily excluded from the system, as it was the case within Hach Lange in the Czech Republic in 2007, where more than 90% of the employees were fired because they didn't comply with regulations.
Pragmatic Cultures versus Normative Cultures	The company shows rather normative characteristics, with a low level of flexibility.

4.2.3. IT System Integration

As we have seen in the theoretical part, one of the tasks that are absolutely critical, but also very sensitive during the integration programme, is the IT system integration.

Since the IT system determines all aspects of the organization, their proper integration is of high priority. It is important as well to start with the system integration as early as possible as it gives afterwards a better clarity of the other integration operations. Issues like order registration, order processing, price calculations in various currencies, etc. have to be solved in due time, so that daily operations don't get affected.

The communication inside the company is done mostly by emails, internal programs and through the Intranet. All new acquired employees get access to Danaher's Intranet; however there is limited access to the so called "Drive H" – the corporation's central data base, where folders' access rights are granted depending on the hierarchy levels, company, country and department.

The employees can use the data that they can access for all their projects. The level of Task Support – meaning the degree to which employees perceive they are being supplied with necessary materials, equipment, services and resources is extensive.

4.2.4. Performance Tools

Other systems that are implemented by Danaher in all the acquired companies during the integration process are performance related tools.

After agreeing on a business strategy, a Policy Deployment tool is used to implement and monitor the established objectives (see an example of a Top Level Policy Deployment Chart in Annex number 14). The Policy Deployment Review is actually the Japanese tool of Hoshin Kanri, which translated means "guiding light".

Danaher's business attitude is directed towards winning and towards continuous improvement. The company's CEO, D. J. Lawrence Culp, revealed in an interview[119] the way of thinking behind this attitude: "There are a lot of companies where if you win 10-9, nobody wants to talk about the nine runs [they] just gave up. We'll celebrate the win, but we'll talk about 'How did we give up nine runs? Why didn't we score 12?'"

[119] "A Dynamo Called Danaher", The Business Week, February 19, 2007, http://www.businessweek.com/magazine/content/07_08/b4022065.htm?chan=search

This way of thinking determines both, the short and the long term goals and the according targets of each business unit. The new acquired company has therefore to adapt to and integrate the high goal settings of the corporation.

Policy Deployment Reviews take place once a month and they are linked mainly to the strategic plan. First come a group of 3 to 5 year targets aimed at improving company performance. They are followed by annual goals, which have to be achieved in order to make the longer term objectives feasible. These annual goals initiate further sets of required operation improvements. As Mr. Culp described: "First, there are the financial variables we focus on: profit/loss, balance sheet, and cash, with particular emphasis placed on achieving a target ROIC in the case of a new acquisition. In addition, there are key performance indicators for each business – on-time delivery, yield, etc. – which number around 15 for each business and are derived from the plan. Then there are the elements driving breakthroughs. Last, there are the intangibles we examine by walking through the shop floor, or having skip-level lunches. These meetings are hands-on. They are designed to ensure that the numbers are real, as well as to build process and organization for the longer term."[120]

The entire Policy Deployment tool is represented on a piece of paper. Progress made is compared to the target and then coded according to certain colours: red means the target is off track, green if it is on track and yellow if it is uncertain. For the red indicators, an analysis is undertaken by applying the "5 Why's" method.

What is the "5 Why's" method?

At the core of the entire improvement philosophy there is a very simple question: Why? In an interview[121] with Jeffrey K. Liker, Yuichi Okamoto, a former Toyota Technical Centre vice president, divulged the secrets of Toyota's Product Development System: "We have a very "sophisticated" technique for developing new products. It is called five-why. We ask why five times.". Using this

[120] Anand, B., Collis, D.J., Hood, S., "Danaher Corporation", Harvard Business School, July 2008
[121] Liker, J.K., "The Toyota Way – The Company that Invented Lean Production", Mc Graw Hill, 2004, p.252

technique, the employees and the managers can get to the root of problems, which usually lies hidden beyond the source.

The following tables represent hypothetical examples used by Danaher in their internal problem-solving training, examples taken from the Toyota training programs:

	Level of Problem	**Corresponding Level of Countermeasure**
	There is a puddle of oil on the shop floor	Clean up the oil
Why?	Because the machine is leaking oil	Fix the machine
Why?	Because the gasket has deteriorated	Replace the gasket
Why?	Because we bought gaskets made of inferior material	Change gasket specifications
Why?	Because we got a good price deal on those gaskets	Chance purchasing policies
Why?	Because the purchasing agent gets evaluated on short-term cost savings	Change the evaluation policy for purchasing agents

Table 11: "5 – Why" Investigation Questions,
Source: Adapted after Company Materials and Peter R. Scholtes, "The Leader's Handbook", Mc Graw-Hill, 1998

What is the problem?

Employees are frustrated and complaining about the new e-mail system.

Why? Employees do not understand how to use the functions of the system.

Why? The employees didn't receive adequate training on the new system, a manual they can use, and didn't give input on their needs for the new system functions.

Why? The I.S. manager had a poor planning process: didn't ask employees about their needs on system functions, didn't plan for training up front, didn't notify employees using multiple communication channels, and didn't review the manual with employees (pilot group).

Why? The manager didn't get direction and support from his boss, or receive planning process training.

Why? The company as a whole does not have effective internal processes in place, nor is it disciplined in using good process.

Why? Senior management hasn't worked to create a work culture that encourages and reinforces effective internal processes.

Table 12: "5 – Why Analysis of E-mail Problems"
Source: Danaher Materials adapted after Toyota Training Materials (Toyota Technical Center)

It is important that all the integration tools described above are performed with excellence, however one Danaher always keeps one thing in mind: **Speed.** Even before the deal is done, the integration team, made up of managers throughout the company steeped in training, works with the acquisition target "to inject a heavy dose of Danaher DNA".

Quickly identifying the decisions that need to be done is among the integration team's main roles. The urgency allows the progress and the synergy processes to stay on track. Hence the integration team must identify very fast with what executive they have to deal for a particular issue, but sometimes the urgency is so high, that the appropriate responsible person can not even be found in due time. In such cases, the decisions are made by the integration leader and only afterwards are the responsible executives informed about the implemented measures. In this way, the operations aren't stopped and progress can continue as planned. It may be sometimes that the decision isn't optimal, but adjustments will be made in time – the most important issue being that the project doesn't stall.

4.3. HRM Considerations

We approach now the third dimension of Larsson and Finkelstein's model, the Human Resources issue.

This aspect of the post acquisition integration process is extremely sensitive and requires careful planning when implementing it. Starting with eventual personnel reductions, with informing the new acquired employees (or "associates", as called in the Danaher terminology) about the following changes, with new compensation schemes or training programs, Danaher has a systematic approach for every aspect.

- **Restructuring**

The post acquisition integration often means cost savings related to redundant facilities, redundant employee/personnel functions or revising management capabilities.

First of all, as stipulated in the Agreement and Plan of Merger[122], the Parent (Danaher Corporation) is entitled to designate a certain number of Board Directors in the new acquired entity, depending on the number of Common Shares beneficially owned by Danaher or its Affiliates. The new acquired Company's Board is required to have always two members who were previously, before the

[122] "Agreement and Plan of Merger", October 14, 2007, by and among Danaher Corporation, Raven Acquisition Corp. and Tektronix, Inc., **Article 1, Section 1.3, Directors.**

acquisition, in the Company Board. Managerial retention rates differ however across the performed mergers, but generally between zero and 50% of the senior managers were released within a few years after the deal.[123]

Back in 2001, when Microtest was purchased by Fluke, one of Danaher's companies, most of its workers were picked up by Fluke and the majority remained based in Phoenix, Arizona, without having to relocate. However, Microtest had to let go 40 workers as a result of the merger and restructuring which occurred due to the fact that some parts of Microtest's business model did not conform to the Fluke business mode. Sometimes, Danaher addresses the surplus staff issue through re-training and re-deployment.

- **Communication**

Among the first steps of integrating the new acquired working force is creating the foundations of an open communication. Precisely on the announcement date of the fusion, a letter is being sent to all corporate officers, business-unit heads and members of the acquired unit to inform them about the current situation. This briefing email shortly presents the acquiring corporation, its value and portfolio and answers general questions about the reasons of the merger and about the strategic importance this move has towards the customers. Further questions and answers address typical fears and issues that usually go through the mind of the staff members, such as

- *Am I now officially a Danaher employee?*
- *Does this mean I am guaranteed a permanent position with Danaher?*
- *What about my benefits?*
- *Will our benefits change?*
- *Will our compensation change?*
- *What methods are used to disseminate company information to all employees?*

[123] Anand, B., Collis, D.J., Hood, S., "Danaher Corporation", Harvard Business School, July 2008

Annex number 11 and annex number 12 present two examples of "Employee FAQ Sheets". The first one was distributed to employees of Visual Networks, Inc. when the company was bought in 2005 by Fluke Corporation, one of the Danaher Corporation family of companies, and the second one when Microtest was bought by Fluke Networks, a company belonging to the above mentioned Fluke Corporation, part of Danaher, in 2001.

Further letters are sent on a weekly basis during the integration phase to reinforce the merger intentions and keep the employees up to date with the development.

- **New payment scheme**

Danaher's payment scheme will also be integrated into the new company. The annual incentive schemes for each of the acquired executive officers are settled in the so called Summary Compensation Table[124]. These are calculated depending on four elements: the *officer's base salary*, multiplied or diminished (as applicable) by three, discrete factors:

- *Baseline annual bonus percentage* – settled by Danaher's committee
- *Company financial factor*
- *Personal factor* - At the beginning of the year, the Committee establishes annual personal performance objectives for each officer. The executive's performance against these objectives is one of the factors considered by the Committee in determining the personal factor. Among these objectives: quantitative goals relating to the degree of year-over-year operating improvements, cost reductions and return-on-invested-capital performance, improvements in price realization and sales force effectiveness and improvements in the process and execution of growth breakthrough projects, contribution margin and sales performance;

All employees will be offered Danaher's comprehensive benefits program with life, AD&D, long term disability, health, dental, vision, a number of other

[124] Notice of Annual Meeting of Shareholders, held on May 5, 2009

optional benefits and insurance options. These plans are generally available to all salaried employees.

- **Training programs**

This phase includes a key element of the integration process: training the new managers into the DBS.

The Danaher Business System is embedded from the top levels of the organization. The leadership team grew up and developed its operations with the help of this system which is deeply rooted into the corporation's core values. Therefore, Danaher puts a lot of effort and invests a lot of time to instil its values in new acquired managers and employees.

Danaher insists on integrating a good motivational system for its new acquired employees. During the integration period, new acquired managers are often sent to Japan or the USA, where they can directly get to know the philosophy of *kaizen* and set their minds on continuous improvement and eliminating waste. When acquiring Leica[125] in 2005, Danaher took for example 12-mid-level managers on a 3 months world tour to train them into the tools of DBS and to encourage cultural integration.

All new employees have to go through the rigorous DBS training – a process that lasts two years for executives, explaining why Danaher is such a high-performance business, managing successfully to integrate the DBS within the new acquired companies. In fact, Culp himself, the present CEO of Danaher, when he was fresh from Harvard Business School, started his tenure in 1990 at Danaher's Veeder-Root Co. unit by spending a week in Japan building air conditioners in a lean manufacturing plant.[126]

There are several training programs organized during the integration phase, and among them we mention[127]:

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[125] Headquartered in Wetzlar, Germany, Leica Microsystems is a leading global designer and producer of innovative high- precision optical systems for the analysis of microstructures
[126] "A Dynamo Called Danaher", The Business Week, February 19, 2007, http://www.businessweek.com/magazine/content/07_08/b4022065.htm?chan=search
[127] www.danaher.com

Danaher Business System Leader (DBSL) Program:

This training program introduces to the acquired employees the tools to create sustainable competitive advantage by continuously improving quality, delivery, cost and innovation. The goal of this program is to provide these tools to all Danaher employees (or "associates") by managing with Policy Deployment and Daily Management and eliminating waste using the DBS Tools. This way, the new acquired company can develop the expertise to reach its own world-class objectives. One of Danaher's main training approaches is that learning is done best through hands-on experience. Therefore, trainings often take place at each location.

In an exclusive interview with the Dental Economics Magazine[128], two members of Danaher's leadership team, Bob Joyce, who has responsibility for the Dental Equipment Group in the Americas, and Daniel Even, President, Sybron Dental Specialties, revealed some examples of how the DBS training takes place. They first start by identifying a customer problem and by gathering a responsible team to participate in this event that will fix the respective customer issue in less than a week. Bob Joyce: "It was taking too long for our customers to receive the product after ordering it. We needed to reduce the total manufacturing time so that we could satisfy customers' needs on time. The kaizen began first thing Monday morning and, by Wednesday evening, we had completely revamped the production cell — the area where the product is built — and implemented new standard work procedures with the operators in the cell. In just three days, the team had implemented just two DBS tools (5S and Standard Work) and solved the problem! (…) The experience is incredibly exciting because of the impact we see within the first couple of hours of a kaizen. We actually move things on the floor and see results very quickly, which builds an incredible amount of momentum. As people see the results, they become more engaged. We end up working long hours because we're so eager to get to the finish line and implement the tools to their fullest extent. It's very energizing and exciting and high impact."

[128] "Exclusive Dental Economics Interview: The Danaher Leadership Team", by Joe Blaes, Editor, February 2007, http://www.dentaleconomics.com/display_article/284915/54/none/none/Feat/Exclusive-Dental-Economics%C2%AEinterview:-The-Danaher-leadership-tea

Daniel Even: “DBS was one of the really attractive aspects about Danaher that, as an acquirer, we were particularly interested in pursuing. Our first kaizen was on the factory floor. We have a product, the clear ceramic ortho bracket, which is very difficult to make. Any slight variation in the manufacturing process causes the material to chip or fracture, and we end up with a lot of scrap. Even though the materials to build this product are very expensive and the time to build it is lengthy, it’s a very important product for us because patients want braces that don’t show. This product is ground out of a block of crystal; the crystal itself is actually grown. On top of that, it has to cure for a long time. The entire process takes almost 24 days and takes up a lot of floor space. During a kaizen, we literally shrunk the floor space 30 percent, and we significantly reduced the number of days it takes to build the part to six days. So, we ended up with the same quality product, but with less floor space and a faster delivery time to the customer.”

During the integration phase, a DBS Director is appointed by Danaher to promote and facilitate the successful implementation of the Danaher Business System. Typical assignments include[129]:

- Facilitating Kaizen activity in all departments and functions within the facility
- Educating new associates on the DBS principles and ensuring compliance with the DBS Immersion program
- Working with Plant Manager and Operations leaders on improving the manufacturing process using the DBS tool kit
- Establishing and maintaining regular training courses to ensure that associates at each location remain apprised of the DBS tools that are available to assist them in their day-to-day activity
- Creating and maintaining the appropriate visuals to ensure that all associates have immediate feedback on the performance of their manufacturing cell

[129] Company Materials

- Partnering with Operations on all QDSC (Quality, Delivery, Safety, Cost) initiatives

The DBS Director teaches during these training programs, and sometimes Danaher's CEO himself attends these events and shares his knowledge. According to him, "the goal is to get newcomers to appreciate elements like single piece flow, visual maps, and so on. It is action learning. Furthermore, having the president of the company put on jeans and work boots and get involved with a broom on the shop floor can be powerful in setting expectations. It is an opportunity to touch a lot of people quickly."[130]

Executives of the new acquired company are expected to complete the so called **Executive Leadership Training Program**, which typically takes two years and includes seven distinct modules.

Another training program performed for the new acquired associates is the **Engineering Leadership Development Program (ELDP)**, especially designed for highly motivated employees who have demonstrated outstanding leadership potential and who are prepared for senior management positions. This training program covers the areas of Manufacturing Engineering, Quality Engineering, or Operations Management giving the chance to participants to get acquainted with the various applications of the lean manufacturing environment at different manufacturing locations. Participants may have to relocate several times until the completion of the program, which typically lasts about 12 months.

Other training programs include the General Management Development Program (GMDP), Marketing Leadership Development Program (MLDP), Financial Leadership Development Program (FLDP), Human Resources Leadership Development Program (HRLDP) or Supply Chain Leadership Development Program (SCLDP).

Besides the DBS training seminars organized in different parts of the world, training materials are recommended and available through the acquired

[130] Anand, B., Collis, D.J., Hood, S., "Danaher Corporation", Harvard Business School, July 2008

company's or Danaher's web site at http://www.dbsoffice.com to support the operations accordingly. The senior level management of the acquired firm can recommend who attends training (i.e. new employees, changes to procedure, etc).

One impressive example is Danaher's employee schedule at **Gilbarco** in 2002, especially when taking into account speed considerations, the integration team managing to train the new acquired employees in just a few months. The integration procedure rolled on even before the acquisition was closed, creating the frames and setting the basis for the implementation of the Danaher Business System within the new organization. "By the time the acquisition closed in February of that year, Gilbarco executives had been trained in the basics of DBS and within 60 days of the close, all Gilbarco employees had undergone DBS training."[131]

Danaher's personnel policy represents a part of an integrated, long-term approach to running the business. This policy involves however a major risk: Danaher's continuous success has created a lot of interest in the DBS from major competitors, as Mr. Culp himself says[132]. The competitors would like to implement the same system into their operations and copy the DBS by hiring Danaher's personnel, therefore Danaher has become "a real recruiting target of late", raising a major challenge for the corporation to retain the talent they have today.

Now that we have seen the integration approach of Danaher Corporation, let's have a look at some successful examples.

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131 Danaher Annual Report 2004
132 „A Philosophical Approach to High Performance", Accenture Outlook 2006, Number 1, Interview with Larry Culp, President and CEO of Danaher

CHAPTER 5: Successfully Integrated Companies

Structure of the chapter:
• Sybron • Videojet & Willett • Tektronix • Accu-Sort Systems • Radiometer

The Danaher Integration System proved over and over again to be a very successful approach in achieving synergies and increasing both value for customers and organization returns. Executives of acquired companies are pleased as well with the progress their companies went through since the deal was closed: "**Sybron**[133] was really a sales and marketing focused organization … and operations (were) part of supporting that," said Don Tuttle, the company's president of specialty products.[134] "What Danaher brought to us, and has been successful with, is bringing us an operations focus." The focus on manufacturing and operations, combined "with our sales and marketing expertise (has) made us a much stronger company," Tuttle said.

In February 2002, Danaher acquired **Videojet**, a global leader in coding solutions for products and packaging, in order to access the Product Identification market. Less than a year later, Danaher acquired a key competitor, **Willett**, with the purpose of complementing Videojet's existing business. Integrating Willett into the organization offered Danaher a strong position in fast-growing markets such as China, Brazil, Turkey, Russia, and Eastern Europe. By implementing the Danaher Business System tools, an integration of the two firms was realized in less than a year. The two sales forces were integrated – offices in the U.S., Europe, and Asia were combined, creating a more effective geographic presence, driving a more than 10% increase in per-associate sales, and providing the sales force with a broader, more competitive product portfolio.[135] Furthermore, the quality of the products was significantly improved by reducing defects by 25%, and the productivity rose by 10% by closing 5 of the 11 manufacturing sites. Due

[133] Danaher acquired 94% of Sybron Dental Specialties, Inc.'s shares in 2006
[134] Interview in the Orange County Business Journal, Sep 24-Sep 30, 2007, http://findarticles.com/p/articles/mi_qa5293/is_200709/ai_n21263804/
[135] Danaher Corporation Annual Report 2003

to a high level of integration, the two new acquired companies, Videojet and Willett, managed already in April 2003 to launch a co-developed product. By combining the two businesses, Danaher "has built a strong platform providing compelling product solutions" – just an example of Danaher's Integration System efficiency.[136]

Another impressive example is the acquisition of **Tektronix** in 2007.[137] Following the same Danaher speed pattern, within only one year after the deal was closed, Tektronix transformed into a new company. "The quasi-academic Tek campus near Beaverton has been converted into a lean, disciplined operation with a strict focus on the bottom line and little appetite for the kind of freewheeling exploration that defined Tektronix for most of its first 60 years."

Following the $2.85 billion transaction, Danaher started integrating Tektronix by restructuring personnel and cutting hundreds of jobs: during the first three quarters of the year, Danaher reduced Tektronix' 4,500-member global work force by more than 10 percent. Furthermore, Tektronix' chief executive, Rick Wills, was replaced by a new CEO, the Danaher executive Jim Lico.

Another major change performed by Danaher was the important Spinoff involving Tektronix' communications business. This business part had been purchased by Danaher Corporation three years before acquiring the entire organization and is operating nowadays as a Texas-based Danaher subsidiary, largely separated from Tektronix.

Danaher has aggressively implemented the Danaher Business System, evaluating the existing portfolio and investing in products with high growth prospects. Research and development was redesigned, aiming at maximizing profits and the entire management philosophy was encouraged to dedicate itself to continuous improvement. Cost savings were pursued in all departments, and two Tektronix

[136] Idem 135

[137] Example taken from "Tektronix: From Freewheeling to Focused", Mike Rogoway, http://www.oregonlive.com/business/index.ssf/2008/11/danaher_ownership_transforms_t.html, Monday November 10, 2008

administrative buildings on its Washington County campus were even vacated and put up for lease.

All these measures lead to a more profitable business, with growth prospects even for 2009, despite the current economic crisis.

Accu-Sort Systems is another company that has been entirely transformed following its acquisition by Danaher[138]. By implementing the Danaher Business System, the acquiring corporation provided the improvement experience and tools "to significantly turn around the company," affirms the company's president, Gregg Branning.

During the integration phase, all five business units that make up Accu-Sort have undergone major changes. DBS tools were introduced into the "products group, which makes laser and camera-based scanners (….); the Service group, which provides 24/7 customer support; and the RFID group, which develops RFID sorting and tracking systems."

Danaher put a lot of emphasis on the Voice of Customer, analyzing quality requirements from the client's point of view. This lead to major on-time delivery improvements, faster repairs, reducing also "the time it takes to set up a standard scanning tunnel from five days to less than a half day".

The Danaher Business System changed entirely also the way Accu-Sort deals with customers: "Now sales personnel, support, and service technicians often spend more time at customer sites, even before a problem arises, observing how the company's products and solutions are being employed and anticipating potential improvements."

Accu-Sort draws major advantages from Danaher's existing supplier network as well, creating essential synergies that lead to important cost savings: "The power of being part of Danaher comes from not only its large size but its huge scope,"

[138] Example taken from http://www.themanufacturer.com/us/profile/5741/Accu-Sort_Systems, Accu-Sort Systems, Always scanning for improvements, Manufacturing in Action, Source: The Manufacturer US

Branning says. About half of Accu-Sort's sales are generated overseas, enabling sourcing in low-cost regions such as China or India. "It doesn't matter where it is or what it is, we can leverage the Danaher network to go and get it."

Anand, Collis and Hood[139] describe in their study a very interesting integration example, the one of **Radiometer**[140], a Danish producer of instruments for testing and measuring blood gases. At the beginning, managers of the acquired company were a little bit sceptical that Danaher would be able to improve things. As Peter Kurstein, the CEO of Radiometer, said "the management team had an average tenure of 16 years in the company. We loved the company, but also thought we were pretty good and were sceptical that anybody, without detailed knowledge of our niche, could make us any better.". The reason Radiometer chose to merge with Danaher out of the other bidders was because "two Danaher executives asked for a three-hour walk through one of the plants in order to understand the potential for lean manufacturing".

About a month after the acquisition, an Executive Champion Orientation team building event took place. The top 40 managers at Radiometer were split into 6 groups in order to do value-stream mapping and to recognize the improvement opportunities. According to Mr. Kurstein, in one of the groups they discovered that a little plastic part which took 1,45 seconds to produce, took 18 days to move from raw material to shipping. They developed improvement strategies to reduce that process to less than two days by creating one-piece work flow and by eliminating the planning department and IT infrastructure that had previously managed work scheduling. They implemented afterwards the same way of thinking in other departments as well, reducing for example the development time in R&D by 33%.

After about another month, the so called "strat plan" took place, where Radiometer presented their strategy and their analysis. They were surprised to see that Danaher was not going to tell them what to do differently, but challenge them

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[139] Anand, B., Collis, D.J., Hood, S., "Danaher Corporation", Harvard Business School, July 2008
[140] Radiometer was acquired by Danaher in 2005

on whether they are taking full advantage of the existing opportunities. For example, when hearing that Radiometer has 40% market share in some segments, Danaher questioned why the other 60% are choosing other products. This was a blocking question for Radiometer, as they were actually satisfied until then with their market position. It became clear to Radiometer that they did know their customers very well, but that they didn't know their competitors' customers. By changing their attitude, not only to protect their present market share, but to figure out how they could win further shares, they opened the door to new growth opportunities.

Following the development of the strategic plan, an organizational review was performed by Danaher, allowing them to identify necessary organizational and personnel changes. Two executives were brought from Danaher at Radiometer and kaizen trainings took place in a Michigan plant. Kurstein also was sent on a one week kaizen project at another Danaher company.

In Kurstein's opinion however, the Policy Deployment had the largest impact on the acquired company. Before the acquisition, Radiometer used to establish three-year strategic goals and keep them a major secret, even from their own employees. With Danaher's help and their Policy Deployment Strategy, they realised that it is much more effective to engage all levels of the organizations into goal achievement than trying to put into practice secrete plans. Once they settled the company's strategic goals, they started cascading the five to seven strategic priorities needed for improving performance into a series of one year goals.

"The next step", he continues, "was to identify the processes that needed change, such as accelerating product development or introducing value selling into the sales force. For each process change required, one or two metrics were defined that would effectively monitor progress towards these goals and monthly targets identified for each. These targets were posted on a single piece of paper outside the CEO's office and other locations, such as the lunchroom, and tracked monthly for all to see progress. Level one goals for the organization as a whole were then translated into level two goals for each department, and then into individual action plans, each of which had its own sheet attached to individual's doors."

The acquisition proved to be a success in Radiometer's case as well. In just a short period of time, they increased their growth to high single digits and their margin by another 4%. And according to Kurstein, only half of the potential was exploited until now.

Radiometer's success created a solid base for Danaher to expand into Dental and Life Sciences, their revenues from Medical Technology reaching $3 billion in 2007.

Chapter 6: Conclusions

Danaher's history has shown that the corporation is an excellent acquirer and an even better integrator, by performing an aggressive, disciplined approach of the post-acquisition process, based on their best practices. The core of their integration approach represents the Danaher Business System, which is implemented into purchased entities within one year after the deal was closed, most of the firms purchased being small to midsize companies and supplementing existing businesses.

What is more interesting is the fact that Danaher's post-acquisition integration approach supports Larsson and Finkelstein's model. The corporation's strategy follows the hypotheses made by the two researchers:

- STRATEGY

Going back on Larsson and Finkelstein's theory, they underlined the combination potential with regards to the *degree of relatedness as well as to complementary synergy sources, such as different products, know how or market access that fit one another*.

Danaher takes advantage of both combination alternatives: Bolt-Ones on the one side and Adjacencies and Creation of New Platforms on the other represent the two forms of combination potential, the first one being characterized by relatedness of businesses, whereas the second one brings complementary synergy sources into the corporation.

- ORGANIZATIONAL

The greater the organizational integration, the greater the synergy realization.

Danaher definitely pursues an aggressive organizational integration with regards to the implementation of the Danaher Business System. While some new acquired companies may still keep a certain degree of independence with regards to operations and production, they all are obliged to adopt the DBS and its improvement tools in a very short period of time. This system runs then all daily operations, influencing not only the short term targets, but the long term goals as well. Every employee, from the janitor to the president, and every department, from accounting, through marketing to personnel have to undergo intensive DBS training and implement the DBS tools accordingly.

- EMPLOYEE RESISTANCE

The greater the employee resistance, the less the synergy realization.

Danaher definitely has a systematic approach to personnel integration, trying to avoid employee resistance within the new organizations. Starting by informing new acquired employees about the changes, continuing with a strong communication policy and intensive personnel training programs, the corporation manages successfully most of the time to avoid misunderstandings and hard-feelings.

The degree to which new acquired employees feel Danaher's changes depends however on where they work.[141] In Tektronix' case for example, Danaher continued to support the most successful research projects, employees in those programs being satisfied and experiencing major positive changes. Employees working on less successful projects however feared losing their jobs, this situation negatively affecting the work environment. Information technology specialists were also under pressure as Danaher "worked to consolidate IT operations with Tek's new corporate cousin, Everett, Washington-based Fluke Corporation".

Overall however, Danaher's post-acquisition integration strategy proved to be a real success during the past two decades. Last year's revenues grew to almost $13 billion; however the goal set in 2002 by the company's CEO, Mr. Culp, is to reach $25 billion in sales by 2012.[142]

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[141] Example taken from "Tektronix: From Freewheeling to Focused", Mike Rogoway, http://www.oregonlive.com/business/index.ssf/2008/11/danaher_ownership_transforms_t.html, Monday November 10, 2008

[142] Company Materials

This is a very ambitious goal, especially under present economic market conditions. And if we keep in mind that about two thirds of the average annual growth is due to acquisitions, to reach that target would either mean to increase the number of annual deals or to acquire much larger companies. But acquiring larger firms would certainly represent a bigger challenge for the integration process, as integrating the Danaher Business System and the approaches of Lean Manufacturing in bigger, stronger tradition based and cultured organizations would acquire more efforts. However, the organization's attitude that you can always be better tomorrow than you are today surely deserves a major part of the credits for a successful integration, Danaher's improvement tools certainly defining their synergies.

What are the Prospects During the Present Recession?

The overall company growth for 2008 was significant compared to 2007, but given the recession of the global economy, all of this growth is attributed only to the first nine months of 2008. Demand decreased considerably towards the end of the year in the Company's industrial and consumer oriented businesses such as dental technologies, product identification, enterprise network performance management and mechanics' hand tools businesses.

In the first quarter report of 2009, Culp, Jr., President and Chief Executive Officer, stated, "We continue to experience significant headwinds across our businesses and end markets as a result of a weak global economy. Few of our businesses have been immune to this unprecedented downturn and as a result we continue to deploy cost reduction actions across the company. Core revenues declined 10% in this quarter, compared to the first quarter of 2008. Our operating cash flow performance, despite softer revenues was over $310 million, declining only 5% as compared to the same period last year. While we expect economic conditions in 2009 to remain difficult, we believe our solid portfolio of businesses, our strong balance sheet and robust operating model rooted in the Danaher Business System will provide us the opportunity to outperform."

Indeed, despite the difficult economic environment, Danaher continues to generate increases in operating cash flow (which increased last year by 9.5%) and free cash flow (8.5% increase over 2007), 2008 being also the 17th consecutive year in which free cash flow has exceeded net income. This free cash flow represents nowadays, given the present global conditions, an incredible opportunity for Danaher to continue expanding their portfolio through strategic acquisitions.

These acquisitions and their integration might involve however several risks that could negatively affect the corporation's growth[143]:

- New acquired companies could under-perform relative to Danaher's expectations and the purchase price
- Acquisitions may create unexpected challenges for the integration team
- The corporation might experience difficulties in integrating personnel, operations and other systems.
- The anticipated synergies and cost savings might not be achieved.
- The company might face the inability to hire, train and retain a sufficient number of qualified officers and other employees. This would have a further impact on effectively integrating new companies and successfully implementing the Danaher Business System

Still, it is hard to predict how the current economic environment will affect Danaher's acquisition strategy and whether their Integration Strategy will face more challenges or not. Further unexpected global events might also have unpredictable effects on their business growth. The swine flu, a dramatic global issue, had recently an interesting positive effect on Danaher's sales for example. During June 2009, airport officials in Mexico have invested nearly a half a million dollars in purchasing thermal imagers (infrared cameras) from Fluke Corporation,

[143] Danaher Annual Report 2008

a company owned by Danaher, to help them screen people for H1N1 influenza A.[144]

It will be interesting to analyze in the future whether Danaher's post-acquisition integration strategy will work as smoothly and register such impressive results during a hard recession as it does under conditions of economic boom. This would definitely be an interesting subject for future research.

[144] www.danaher.com/news

Appendix:

Abstract (English)

Mergers and acquisitions are a frequent phenomenon of the past decades, yet more than 50% of them fail to achieve their strategic and financial objectives. However, those who work, create a significant value. This paper deals with the post-acquisition integration process, trying to identify the key factors that determine a positive outcome of an M&A and establish how integration failures can be overcome. The questions raised are what are the challenges that both the acquiring as well as the acquired company face after the deal was closed and how the integration of the acquired company can happen, so that the new firm adds value. However, the analysis of post-acquisition integration is still difficult, since researchers have limited insight – maybe one of the reasons why so many mergers are mismanaged and continue to generate disappointing results.[145] This suggests that mergers and acquisitions, even though performed by so many companies and within various industries, are generally not well understood in practice.[146]

Larsson and Finkelstein (1999)[147] developed and tested an integration model based on an interrelationship among strategic, organizational and human resource factors and this paper aims at testing this model by analyzing the integration strategies of one of the most successful acquirers nowadays, the Danaher Corporation, a major electric technology concern. Over the past decades, Danaher has done an excellent job integrating its over 400 purchases, "expanding acquired-companies' margins, and generating free cash flow in excess of net income"[148], being often called in the business press as a "well-oiled acquisition machine".

We begin by explaining what M&As really are and why they are such an important strategic tool for growing companies, and continue then with reviewing the literature about strategic, organizational and HR integration issues. The case study will discuss then the way these integration aspects are approached within

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[145] Chatterjee et al. 1992, Haspeslagh and Jemison 1991, Schweiger and Walsh 1990

[146] Jemison and Sitkin 1986, Hitt et al. 1991, Porter 1987

[147] Larsson, R., Finkelstein, S., "Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization", Lund University, Sweden 1999

[148] http://www.businessweek.com/investor/content/oct2005/pi20051011_3372_pi008.htm

Danaher and raise question marks about possible risks that might interfere with a smooth integration process, leading to poor synergy realization.

Abstract (Deutsch)

Fusionen und Akquisitionen sind ein häufiges Phänomen der letzten Jahrzehnte, dennoch mehr als 50% scheitern ihre strategischen und finanziellen Ziele zu erreichen. Diejenigen die funktionieren, schaffen jedoch einen bedeutenden Nutzen hinzuzufügen. Diese Arbeit befaßt sich mit dem Post-Akquisition Integrationsprozess, indem wir versuchen die Schlüsselfaktoren, die eine positive Entwicklung der M&A hervorrufen, zu identifizieren, und festzulegen, wie Integrationsmisserfolge überwunden werden können. Die Fragen die gestellt wurden sind welche sind die Herausforderungen denen sowohl die erwerbenden, als auch die übernommenen Gesellschaften gegenübergestellt werden nachdem die Transaktion geschlossen wurde und wie soll die Integration der erworbenen Gesellschaft erfolgen, so dass der allgemeine Wert steigt. Die Untersuchung der Post-Akquisition Integration ist aber noch schwierig, da die Wissenschaftler immer noch einen begrenzten Datenzugang haben – vielleicht einer der Gründe warum viele der Fusionen schlecht verwaltet werden und weiter enttäuschende Ergebnisse generieren.[149] Das führt zum Schluss, dass auch wenn so viele Unternehmen Fusionen und Akquisitionen in verschiedenen Branchen begehen, diese in der Praxis nicht gut verstanden werden.[150]

Larsson and Finkelstein (1999)[151] haben ein Integrationsmodell entwickelt und getestet, das auf gegenseitige Beziehungen zwischen strategischen, organisationellen und Personalmanagementfaktoren beruht, und diese Arbeit zielt dieses Modell anhand der Integrationsstrategien eines der erfolgreichsten Erwerber heutzutage, die Danaher Corporation, zu testen. In den letzten Jahrzehnten hat dieser Technologiekonzern hervorragende Ergebnisse durch die Integration von über 400 Übernahmen vollbracht.. Die Gewinnspannen der

[149] Chatterjee et al. 1992, Haspeslagh and Jemison 1991, Schweiger and Walsh 1990
[150] Jemison and Sitkin 1986, Hitt et al. 1991, Porter 1987
[151] Larsson, R., Finkelstein, S., "Integrating Strategic, Organizational, and Human Resource Perspectives on Mergers and Acquisitions: A Case Survey of Synergy Realization", Lund University, Sweden 1999

erworbenen Unternehmen wurden kontinuierlich erweitert[152] und das führte zu der Tatsache, dass Danaher heutzutage von der Fachpresse als eine “gut geölte Akquisitionsmaschine” genannt wird.

Am Anfang erklärt diese Arbeit was genau M&As sind und warum sie ein so wichtiges strategisches Instrument zum Unternehmungswachstum darstellen. Wir besprechen dann die existierende Literatur bezüglich strategischen, organisationellen und Personalmanagmentfaktoren. Die Fallstudie wird weiters zeigen wie diese Integrationsaspekte innerhalb des Danaher Konzerns behandelt werden und Fragen stellen bezüglich der eventuellen Risiken die einem reibungslosen Integrationsprozess im Wege stehen und eine mangelhafte Synergienverwirklichung hervorrufen könnten.

[152] http://www.businessweek.com/investor/content/oct2005/pi20051011_3372_pi008.htm

Annex 1: Danaher Selected Financial Data
(in thousands of $, except per share information)

	2008	2007	2006	2005	2004
Sales	12,697,456	11,025,917	9,466,056	7,871,498	6,776,505
Operating Profit	1,869,477	1,740,709	1,500,210	1,247,575	1,089,573
Earnings from continuing operations	1,317,631	1,213,998	1,109,206	885,609	735,013
Earnings from discontinued operations, net of tax	-	155,906	12,823	12,191	10,987
Net earnings	1,317,631	1,369,904	1,122,029	897,800	746,000
Earnings per share from continuing operations:					
Basic	4.13	3.90	3.60	2.87	2.38
Diluted	3.95	3.72	3.44	2.72	2.27
Earnings per share from discontinued operations:					
Basic	-	0.50	0.04	0.04	0.03
Diluted	-	0.47	0.04	0.04	0.03
Net earnings per share:					
Basic	4.13	4.40	3.64	2.91	2.41
Diluted	3.95	4.19	3.48	2.76	2.30
Dividends per share	0.12	0.11	0.08	0.07	0.058
Total assets	17,490,128	17,471,935	12,864,151	9,163,109	8,493,893
Total debt	2,619,329	3,726,244	2,433,716	1,041,722	1,350,298

Source: Company Materials

Annex 2: Danaher Corporation & Subsidiaries

	Company Name	Jurisdiction
1	966141 Ontario Inc.	Ontario
2	AB Qualitrol AKM	Sweden
3	ABEK LLC	Delaware
4	AC Intermediate Co.	Ohio
5	ACCU-Sort Asia Pacific PTE LTD	Singapore
6	ACCU-SORT Europe GmbH	Germany
7	ACCU-SORT Systems Australia PTY.LTD	Australia
8	ACCU-SORT Systems, Inc.	Pennsylvania
9	ACME-Cleveland Corporation	Ohio
10	Allesee Orthondontic Appliances, Inc.	Wisconsin
11	Alltec Angewandte Laserlicht Technologie GmbH	Germany
12	Alltec Italia S.r.l.	Italy
13	Alltec UK Ltd.	United Kingdom
14	American Precision Industries, Inc.	Delaware
15	American Thermocraft Corporation	New Jersey
16	Anderson Instrument Co., Inc.	New York
17	Anderson Instrument Company LP	Ontario
18	API Development Corporation	New York
19	API Harowe (St. Kitts) LTD.	St. Christopher/Nevis
20	API Wisconsin Inc.	Wisconsin
21	ApS KBUS 38 nr. 2018	Denmark
22	ApS KBUS38 nr. 2017	Denmark
23	Aquafine Corporation	California
24	Aquafine GmbH	Germany
25	Armstrong Tools, Inc.	Delaware
26	ARTUS Mistral SAS	France
27	ARTUS S.A.S.	France
28	ARTUS Vietnam Co., Ltd.	Vietnam
29	Assembly Technologies LLC	Delaware
30	Attachments International, Inc.	California
31	Autotank AB	Sweden
32	Autotank AS	Norway
33	Autotank Halmstad AB	Sweden
34	Autotank Holding AB	Sweden
35	Autotank OÜ	Estonia
36	Autotank Products AB	Sweden
37	Autotank Russia OOO	Russia
38	Autotank SIA	Lativa
39	Autotank Skellefteå AB	Sweden
40	Autotank Spólka z ograniczonl odpowiedzialnolcil	Poland
41	Aviation Mobility Canada LP	Ontario
42	Aviation Mobility, LLC	Delaware
43	Ball Screws and Actuators Co., Inc.	California
44	BAL-TEC Aktiengesellschaft	Liechtenstein
45	BAL-TEC Innovations GmbH	Germany
46	Bård Andersen AS	Norway
47	Beha-Amprobe GmbH	Germany
48	Beijing Chang GI Service Station Equipment Co., LTD	China
49	Beijing Dianyan Electronic Instruments Co. Ltd.	China
50	Beijing Fluke Shilu Instruments Maintenance & Service Co. Ltd.	China
51	Beijing Raytek Photoelectric Technology Co. Ltd.	China
52	Bobinas del Sur, S.A. de C.V.	Mexico
53	Broomco (3429) Limited	United Kingdom
54	CAL Controls Limited	United Kingdom
55	Calzoni S.r.l.	Italy
56	Cambridge Instruments LTD	United Kingdom
57	Cambridge Marking Co. LTD (Shanghai)	China
58	ChemTreat Argentina, S.R.L.	Argentina
59	ChemTreat Dominicana, S.A.	Dominican Republic
60	ChemTreat Incorporated Chile Limitada	Chile

61	ChemTreat International Inc.	Virginia
62	ChemTreat Jamaica, Limited	Jamaica
63	ChemTreat Mexico, S. de R.L. de C.V.	Mexico
64	ChemTreat Puerto Rico Inc.	Virginia
65	ChemTreat Trinidad, Limited	Trinidad
66	ChemTreat Venezuela, S.R.L.	Venezuela
67	ChemTreat, Inc.	Virginia
68	Claricom Limited	United Kingdom
69	Cleveland Precision Systems GmbH	Germany
70	Codificadora y Etquetadora Willett LTDA.	Chile
71	Coding Management Limited	United Kingdom
72	Comark Instruments, Inc.	Delaware
73	Comark Limited	United Kingdom
74	Communications Technology Mexico, S.A.de C.V.	Mexico
75	Counterfight Solutions Limited	United Kingdom
76	Crannog Software (UK) Limited	United Kingdom
77	Cryla S.A.S.	France
78	Danaher (Shanghai) Industrial Instrumentation Technologies R&D Co., Ltd	China
79	Danaher (Shanghai) Management Co.Ltd.	China
80	Danaher Acquisition Finance GmbH	Germany
81	Danaher Acquisition GmbH	Germany
82	Danaher Acquisition Holding GmbH	Germany
83	DANAHER AUSTRALIA FINANCE PTY LTD	Australia
84	Danaher Australia Holding PTY LTD	Australia
85	Danaher Canada Partners Inc.	Ontario
86	Danaher Canadian Finance LP	Ontario
87	Danaher Canadian Holdings LP	Ontario
88	Danaher China Holding Ltd.	Hong Kong
89	Danaher Dental Technology Investments, Inc.	Delaware
90	Danaher European Finance Company EHF	Iceland
91	Danaher European Finance S.A.	Luxembourg
92	Danaher Evolution GmbH	Germany
93	Danaher Finance APS	Denmark
94	Danaher Finance Company	Delaware
95	Danaher Finance Company AB	Sweden
96	Danaher Finance Company Limited	Cayman Islands
97	Danaher Finance Company, LLC	Delaware
98	Danaher Foundation	Illinois
99	Danaher GbR	Germany
100	Danaher General Partner Company Inc.	Ontario
101	Danaher HK Holdings Ltd.	Hong Kong
102	Danaher Holding B.V.	Netherlands
103	Danaher Holding GmbH	Germany
104	Danaher Hong Kong Finance LTD	Hong Kong
105	Danaher Hong Kong Limited	Hong Kong
106	Danaher Iceland Finance Company LTD	Iceland
107	Danaher ICG Japan Co. LTD.	Japan
108	Danaher Industrial Controls GmbH	Germany
109	Danaher Insurance Company	Vermont
110	Danaher IP Ireland Ltd	Ireland
111	Danaher Linear GmbH	Germany
112	Danaher Luxembourg Sarl	Luxembourg
113	Danaher Malta Limited	Malta
114	Danaher Medical ApS	Denmark
115	Danaher Motion (Hong Kong) Limited	Hong Kong
116	Danaher Motion Finance GmbH	Germany
117	Danaher Motion GmbH	Germany
118	Danaher Motion Holding GmbH	Germany
119	Danaher Motion i Flen AB	Sweden
120	Danaher Motion Inc.	Korea
121	Danaher Motion Israel Ltd. (Servotech)	Israel
122	Danaher Motion Japan Co. Ltd.	Japan
123	Danaher Motion LLC	Delaware
124	Danaher Motion S.A.	Switzerland

125	Danaher Motion S.r.l.	Italy
126	Danaher Motion s.r.o	Czech Republic
127	Danaher Motion Saro AB	Sweden
128	Danaher Motion SAS	France
129	Danaher Motion Stockholm AB	Sweden
130	Danaher Motion Technology, LLC	Delaware
131	Danaher Motion UK Company	United Kingdom
132	Danaher Setra-ICG (Tianjin) Co. Ltd.	China
133	Danaher Tax Administration ApS	Denmark
134	Danaher Tool (Shandong) Co. Ltd.	China
135	Danaher Tool (Shanghai) Ltd.	China
136	Danaher Tool Group LP	Canada
137	Danaher Tool Ltd.	Hong Kong
138	Danaher Tools and Components LP	Ontario
139	Danaher UK Finance Inc.	Delaware
140	Danaher UK Industries (2006) Ltd.	United Kingdom
141	Danaher UK Industries Limited	United Kingdom
142	Danaher UK Partners	Scotland
143	Danaher Verwaltungs GmbH	Germany
144	DANIZE COMÉRCIO DE MATERIAIS GRÁFICOS LTDA	Brazil
145	DANRAD ApS	Denmark
146	Data Recorders Incorporated	Delaware
147	DATAPAQ GmbH	Germany
148	DATAPAQ Inc.	Massachusetts
149	DATAPAQ Limited	United Kingdom
150	DCI Consolidated Industries, Inc.	Delaware
151	Delta Consolidated Industries, Inc.	Arkansas
152	Dental Equipment LLC	Delaware
153	Desertmoon Holdings Ltd.	Cyprus
154	DEXIS LLC	Delaware
155	DH Denmark Holding ApS	Denmark
156	DH Holdings Corp.	Delaware
157	DHCDAN Holding ApS	Denmark
158	DHR Holding India Pvt Ltd	India
159	Diesel Engine Retarders, Inc.	Delaware
160	DJ ACQUISITION PTY LTD	Australia
161	DKK-Toa Corporation	Japan
162	DMG Partners	Delaware
163	DMG Plastics, Inc.	Delaware
164	Dolan-Jenner Industries, Inc.	Massachusetts
165	DOMS A/S	Denmark
166	Dr. Bruno Lange AG	Switzerland
167	Dr. Lange Nederland B.V.	Netherlands
168	DT Holdings Ltd.	Cayman Islands
169	Dynapar Corporation	Illinois
170	E D S C Research and Development Private Limited	India
171	Easco Hand Tools Inc.	Delaware
172	Edelweiss Holdings ApS	Denmark
173	ELE International GmbH	Germany
174	ELE International Limited	United Kingdom
175	ELE International LLC	Delaware
176	EXE International Inc.	Delaware
177	FJ 900, Inc.	Delaware
178	Flow Measurement Corporation	Delaware
179	Fluke (G.B.) LTD	United Kingdom
180	Fluke Australia Holding Pty Ltd	Australia
181	Fluke Australia PTY LTD	Australia
182	Fluke Belgium N.V./S.A.	Belgium
183	Fluke Biomedical Europe A/S	Norway
184	Fluke Biomedical Holding Company	Delaware
185	Fluke Biomedical LLC	Delaware
186	Fluke China Limited	China
187	Fluke Corporation	Washington
188	Fluke Denmark A/S	Denmark

189	Fluke Deutschland GmbH	Germany
190	Fluke Do Brazil LTDA.	Brazil
191	Fluke Electronics Canada LP	Ontario
192	Fluke Electronics Corporation	Delaware
193	Fluke Electronics Sdn. Bhd. (Malaysia)	Malaysia
194	Fluke Europe B.V.	Netherlands
195	Fluke Finance Company EHF	Iceland
196	Fluke Finance Company LTD	Cayman Islands
197	Fluke Finland OY	Finland
198	Fluke France S.A.S.	France
199	Fluke Holding B.V.	Netherlands
200	Fluke Holding Company AB	Sweden
201	Fluke Holding Company Limited	Cayman Islands
202	Fluke Iberica S.L.	Spain
203	Fluke Industrial B.V.	Netherlands
204	Fluke International Corporation (DE)	Delaware
205	Fluke International Holdings B.V.	Netherlands
206	Fluke Italia S.r.l.	Italy
207	Fluke Nederland B.V.	Netherlands
208	Fluke Nederland C.V.	Netherlands
209	Fluke Norge A/S	Norway
210	Fluke Precision Measurements LTD	United Kingdom
211	Fluke Shanghai Corporation	China
212	Fluke Singapore Holdings Pte Ltd	Singapore
213	Fluke Software Ireland Limited	Ireland
214	Fluke South East Asia Pte. Ltd.	Singapore
215	Fluke Sverige AB	Sweden
216	Fluke Switzerland GmbH	Switzerland
217	Fluke U.K. LTD.	United Kingdom
218	Fluke Vertriebsgesellschaft m.b.H.	Austria
219	G&L Motion Control Inc.	Delaware
220	Gems Sensors GmbH	Germany
221	Gems Sensors Inc.	Delaware
222	Gems Sensors Limited	United Kingdom
223	Gems Sensors Pension Trustees Limited	United Kingdom
224	Gendex Corp.	Delaware
225	Gendex Dental Systems KK	Japan
226	Gendex Dental Systems LP	Ontario
227	Gendex Dental Systems PTY LTD	Australia
228	Gendex Dental Systems s.r.l.	Italy
229	GID Acquisition Company	Delaware
230	Gilbarco (NZ) Holdings Ltd	United Kingdom
231	Gilbarco (NZ) LTD	New Zealand
232	Gilbarco Australia Holding Pty Ltd	Australia
233	Gilbarco Australia Pty Ltd.	Australia
234	Gilbarco Canada Corporation / LaCorporation Gilbarco Canadienne	Nova Scotia
235	Gilbarco GmbH & Co. KG	Germany
236	Gilbarco Hong Kong Ltd.	Hong Kong
237	Gilbarco Inc.	Delaware
238	Gilbarco International, Inc.	Delaware
239	Gilbarco Latin America Andina	Chile
240	Gilbarco Latin America S.A.	Argentina
241	Gilbarco LTD (UK)	United Kingdom
242	Gilbarco S.R.L.	Italy
243	Gilbarco Veeder-Root Asia Pte Ltd	Singapore
244	Gilbarco Verwaltungs GmbH	Germany
245	Gilbert & Barker (NZ) PTY LTD	New Zealand
246	Gilbert & Barker Australia PTY LTD	Australia
247	GLI International Limited	United Kingdom
248	GP eta s.r.o.	Czech Republic
249	Great Plains Meter, Inc.	Nebraska
250	Hach Company	Delaware
251	Hach Lange AB	Sweden
252	Hach Lange Acquisition Limited	United Kingdom

253	Hach Lange ApS	Denmark
254	Hach Lange Controle e Analise de Aguas Ltda.	Portugal
255	Hach Lange d.o.o., Slovenia	Slovenia
256	Hach Lange EOOD (Bulgaria)	Bulgaria
257	Hach Lange Finance GmbH	Germany
258	Hach Lange France S.A.S.	France
259	Hach Lange Ges.mbh.	Austria
260	Hach Lange GmbH	Germany
261	Hach Lange Holding GmbH	Germany
262	Hach Lange Kereskedelmi Kft. (Hungary)	Hungary
263	Hach Lange LDA	Portugal
264	Hach Lange LTD (Ireland)	Ireland
265	Hach Lange LTD (UK)	United Kingdom
266	Hach Lange Maroc SARL	Morocco
267	HACH LANGE Monoprosopi EPE	Greece
268	Hach Lange N.V.	Belgium
269	Hach Lange S.L.	Spain
270	Hach Lange S.r.l. (Italy)	Italy
271	Hach Lange s.r.l. (Romania)	Romania
272	Hach Lange s.r.o. (Czech Republic)	Czech Republic
273	Hach Lange s.r.o. (Slovakia)	Slovakia
274	Hach Lange Sp. z.o.o.	Poland
275	Hach Lange, Su Analiz Sistemleri Ltd. Sti (Turkey)	Turkey
276	Hach Pacific Pty Ltd	Australia
277	Hach S.A.S.	France
278	Hach Sales & Service Canada LTD	Canada
279	Hach Ultra Analytics GmbH	Germany
280	Hach Ultra Analytics Inc.	California
281	Hach Ultra Analytics SA	Switzerland
282	Hach Ultra Analytics South Africa Pty. Ltd.	South Africa
283	Hand Tool Design Corporation	Delaware
284	Hart Scientific, LLC	Delaware
285	Hawk IR International Limited	United Kingdom
286	Hawk IR International SARL	France
287	Hawk IR International, Inc	North Carolina
288	Heat Transfer Guarantee Co., LLC	Delaware
289	Hecon Properties, Inc.	New Jersey
290	Hector Finance LTD	Alberta
291	Helen Acquisition Corp.	Delaware
292	Hengstler Controle Numerique S.A.S.	France
293	Hengstler Finance GmbH	Germany
294	Hengstler GmbH	Germany
295	Hengstler Holding GmbH	Germany
296	Hengstler s.r.o. Kezmarok	Slovakia
297	Hennessy Canada LLC	Delaware
298	Hennessy Industries Canada LP	Ontario
299	Hennessy Industries, Inc.	Delaware
300	Holo-Krome Company	Delaware
301	Holo-Krome Limited	United Kingdom
302	Hunfin Limited	Ireland
303	Husky Acquisition LLC	Delaware
304	ICG Holdings Srl	Italy
305	Imaging Sciences International LLC	Delaware
306	Industrial Fasteners, Inc.	Delaware
307	Industrial Sensors, Inc.	Delaware
308	Inet Technologies International, Inc.	Delaware
309	Innotrac Diagnostics Oy	Finland
310	Innova LifeSciences Corporation	Ontario
311	Interdent Holding S.A.	Switzerland
312	Intervest S.A.	Argentina
313	Inuctan Oy	Finland
314	Invetech (R&D) PTY LTD	Victoria
315	Invetech Investments Pty Ltd	Victoria
316	Invetech PTY LTD	Victoria
317	Invetech Services Pty Ltd	Victoria

318	Invetech Technology Consulting PTY LTD	Victoria
319	Invetech, Inc.	Delaware
320	IPL (USA) Trading Inc.	Delaware
321	Ircon B.V	Netherlands
322	Ircon, Inc.	Delaware
323	Ireland Meter Electronics (Hong Kong) Ltd.	Hong Kong
324	Ireland Meter Electronics Zhuhai Co. Ltd.	China
325	Jacobs (Suzhou) Vehicle Systems Co., Ltd	China
326	Jacobs Chuck (Hong Kong) Limited	Hong Kong
327	Jacobs Chuck Manufacturing Company	Delaware
328	Jacobs Chuck Manufacturing Company Ltd. (Suzhou)	China
329	Jacobs Chuck Trading Co. Ltd. (Shanghai)	China
330	Jacobs Holding Company	United Kingdom
331	Jacobs Holdings Ltd.	Cayman Islands
332	Jacobs Manufacturing Co. Ltd.	United Kingdom
333	Jacobs Mexico, S.A.de C.V.	Mexico
334	Jacobs Vehicle Systems, Inc.	Delaware
335	Janos Technology LLC	Delaware
336	Jeneric/Pentron Incorporated	Connecticut
337	Jennings Land Co.	Delaware
338	Jessie & J Company Limited	Hong Kong
339	Jessie & J Holdings Limited	Cayman Islands
340	Joslyn Canada	Ontario
341	Joslyn Clark Controls, LLC	Delaware
342	Joslyn Electronic Systems Company, LLC	Delaware
343	Joslyn Holding Company	Delaware
344	Joslyn Industries	Canada
345	Joslyn Manufacturing Company LLC	Delaware
346	Joslyn Nova Scotia Unlimited Liability Company	Nova Scotia
347	Joslyn Sunbank Company, LLC	California
348	JS Technology, Inc.	Delaware
349	Jung Feintechnik GmbH	Germany
350	K.K. Fluke Japan	Japan
351	K.K. HACH ULTRA JAPAN	Japan
352	Kabushiki Kaisha Shirokusu Shika Shokai	Japan
353	KACO Elekrotechnik GmbH	Germany
354	Kaltenbach & Voight GmbH	Germany
355	Kaltenbach & Voigt Finance GmbH	Germany
356	Kaltenbach & Voigt Holding GmbH	Germany
357	KAVO Austria Dentalwarenhandelsgesellschaft mbH	Austria
358	KAVO Benelux N.V.	Belgium
359	KAVO CZ spol.s.r.o.	Czech Republic
360	KAVO Dental Asia-Pacific PTE. LTD.	Singapore
361	KAVO Dental Corporation	Illinois
362	KAVO Dental GmbH	Germany
363	KAVO Dental Ltd.	United Kingdom
364	KAVO Dental Manufacturing, Inc.	Delaware
365	KAVO Dental Russland o.o.o.	Russia
366	KAVO Dental S.A.	Switzerland
367	KAVO Dental S.A.S.	France
368	KAVO Dental S.L.	Spain
369	KAVO Dental Supply (Malaysia) SDN BHD	Malaysia
370	KAVO do Brasil Industria e Comercio LTDA	Brazil
371	KaVo Hilfe e.V.	Germany
372	KAVO Italia S.r.l.	Italy
373	KAVO Nederland B.V.	Netherlands
374	KAVO Osaka K.K.	Japan
375	KAVO Polska Sp.Z.o.o.	Poland
376	KAVO Promedi S.r.l.	Italy
377	KAVO Scandinavia A.B.	Sweden
378	KB Instrumate	Sweden
379	KDS Systems Company	Delaware
380	Kerr AG (Europe)	Switzerland
381	Kerr Australia PTY Limited	Australia
382	Kerr Australia Holding Pty Ltd.	Australia

383	Kerr Corporation	Delaware
384	Kerr GmbH	Germany
385	Kerr IP, LLC	Delaware
386	Kerr Italia S.r.l.	Italy
387	Kerr U.K. Limited	United Kingdom
388	KerrHawe S.A	Switzerland
389	KERRSPOFA LTD.	Cayman Islands
390	Kingsley Tools, Inc.	Delaware
391	Kollmorgen Asia Investment Company	Delaware
392	Kollmorgen Corporation	New York
393	Kollmorgen Finance Private Ltd. Co.	Cyprus
394	Kollmorgen Holding Company AB	Sweden
395	Kollmorgen India Investment Company	Mauritius
396	Kollmorgen International LLC	Delaware
397	Kollmorgen Overseas Development Corporation	Delaware
398	Kollmorgen S.A.S.	France
399	Kollmorgen Securities Corporation	Massachusetts
400	Kollmorgen Servotronix Ltd.	Israel
401	Kurt Kaltenbach Stiftung GmbH	Germany
402	Launchchange Finance Limited	United Kingdom
403	Launchchange Finance Sarl	Luxembourg
404	Launchchange Holding Company	United Kingdom
405	Launchchange Inc.	Delaware
406	Launchchange Instrumentation Limited	United Kingdom
407	Launchchange Ireland Ltd	Ireland
408	Launchchange Limited	United Kingdom
409	Lea Way Hand Tool Ltd.	Taiwan
410	Leftfront Holdings Pty Ltd	New South Wales
411	Leftfront Pty Ltd	Victoria
412	Leica Biosystems Melbourne Pty Ltd	Victoria
413	Leica Biosystems Newcastle Limited	United Kingdom
414	Leica Biosystems Nussloch GmbH	Germany
415	Leica Biosystems St. Louis LLC	Delaware
416	Leica BSD International Pty Ltd	Victoria
417	Leica Instruments (Singapore) Pte Ltd	Singapore
418	Leica Instruments Ltd Shanghai	China
419	Leica Microsistemas Instrumentos de Precisao Sociedade unipessoal, Limitada	Portugal
420	Leica Microsistemas SA	Spain
421	Leica Microsystems (Hong Kong) Limited	Hong Kong
422	Leica Microsystems (SEA) Pte Ltd	Singapore
423	Leica Microsystems (Shanghai) Ltd	China
424	Leica Microsystems A/S	Denmark
425	Leica Microsystems AB	Sweden
426	Leica Microsystems AG (Schweiz)	Switzerland
427	Leica Microsystems Australia Holding Pty Ltd	Australia
428	Leica Microsystems Belgium BVBA	Belgium
429	Leica Microsystems BV	Netherlands
430	Leica Microsystems Cambridge Limited	United Kingdom
431	Leica Microsystems Canada	Ontario
432	Leica Microsystems CMS GmbH	Germany
433	Leica Microsystems GmbH	Germany
434	Leica Microsystems Holdings GmbH	Germany
435	Leica Microsystems Holdings Inc.	Delaware
436	Leica Microsystems Inc.	Delaware
437	Leica Microsystems IR GmbH	Germany
438	Leica Microsystems KK	Japan
439	Leica Microsystems Limited (UK)	United Kingdom
440	Leica Microsystems Pty Ltd	Australia
441	Leica Microsystems S.A.S.	France
442	Leica Microsystems S.p.A.	Italy
443	Leica Microsystems Trading (Shanghai) Ltd	China
444	Leica Mikrosysteme GmbH	Austria
445	Leica Mikrosysteme Handelgesellschaft mbH	Austria
446	Leica Mikrosysteme Vertrieb GmbH	Germany

447	Leica Technology B.V.	Netherlands
448	Leitz Vermogensverwaltungs und Beteiligungsgesellschaft mbH	Germany
449	LEM HEME Ltd.	United Kingdom
450	LEM Instruments & Meters Co. Ltd.	China
451	LEM NORMA GmbH	Austria
452	Light Controls Corp.	Delaware
453	Linear Motion LLC	Delaware
454	Linx Acquisition Limited	United Kingdom
455	Linx Asia Limited	Hong Kong
456	Linx Printing Technologies Limited	United Kingdom
457	Linx S.A.S.	France
458	Linx Technologies Limited	United Kingdom
459	LLP Holdings PTY LTD	Victoria
460	Logitron Asia Ltd (Thailand)	Thailand
461	Logitron International S.à r.l.	Luxembourg
462	LW Holdings Ltd.	Hong Kong
463	LWHT Corporation	Taiwan
464	Mankeen Investment LTD	United Kingdom
465	Marley Pump Europe B.V.	Netherlands
466	Marsh Interex Ltd.	Jamaica
467	Marsh Label Technologies LLC	Missouri
468	Marsh-McBirney, Inc.	Maryland
469	Master Gears Corp.	Delaware
470	Matco Tools Canada	Ontario
471	Matco Tools Corporation	New Jersey
472	Maxtek Components Corporation	Delaware
473	McCormick Selph Holdings, Inc.	Delaware
474	McCrometer, Inc.	Delaware
475	Mechanics Custom Tools Corporation	Delaware
476	Metrex Research Corporation	Wisconsin
477	Metron US., Inc.	Michigan
478	Microtest Europe LTD.	United Kingdom
479	Moonsilk Holdings Limited	United Kingdom
480	Moonsilk Limited	United Kingdom
481	Motion Engineering Incorporated	California
482	Motion Engineering K.K.	Japan
483	Motion Engineering UK LTD	United Kingdom
484	Namco Controls Corporation	Ohio
485	Namco Controls GmbH	Germany
486	NEFF Antriesbstechnik Automation GmbH	Germany
487	Negele Messtechnik GmbH	Germany
488	Newtown Manufacturing Company, Inc.	Connecticut
489	NLL Investments (UK)	United Kingdom
490	NLL Subco PTY LTD	Australia
491	NMTC Partners Inc.	Ontario
492	NMTC, Inc.	Delaware
493	Noglia Vermogensverwaltung GmbH	Germany
494	Norcim LLC	New York
495	Novocasta Holdings LTD	United Kingdom
496	OECO Holdings, LLC	Delaware
497	OECO LLC	Delaware
498	OldTide Corp.	California
499	OOO SPOFA DENTAL	Russia
500	Orbisphere Limited	United Kingdom
501	Orbisphere Management Holdings S.A.	Switzerland
502	Ormco Australia Holding Pty Ltd	Australia
503	Ormco BV	Netherlands
504	Ormco Corporation	Delaware
505	Ormco de Mexico, S.A. de C.V.	Mexico
506	Ormco Europe BV	Netherlands
507	Ormco GmbH	Germany
508	Ormco IP, LLC	Delaware
509	Ormco Pty. Limited	Australia
510	Ormex, S.A. de C.V.	Mexico

511	Ormodent Belgique S.A.	Belgium
512	Ormodent LDA	Portugal
513	ORMODENT LTD	Israel
514	Ormodent S.A.S.	France
515	OTT France S.a.r.l.	France
516	OTT Hydrometria, S.L.	Spain
517	OTT Hydrometrie A.G.	Switzerland
518	OTT Hydrometry LTD	United Kingdom
519	OTT Latinoamerica, C.A.	Venezuela
520	OTT Messtechnik GmbH & Co. KG	Germany
521	OTT Messtechnik Verwaltungs GmbH	Germany
522	OTT Southern Africa PTY LTD	South Africa
523	Oy Autotank Ab	Finland
524	Pacific Scientific Company	California
525	Pacific Scientific Energetic Materials Company (Arizona) LLC	Delaware
526	Pacific Scientific Energetic Materials Company (California) Inc.	California
527	Pacific Scientific Energetics Company, Hollister Division, LLC	Delaware
528	Pacific Scientific GmbH	Germany
529	Pacific Scientific Ltd.	United Kingdom
530	PacSci Motion Control, Inc.	Massachusetts
531	Pentron Clinical Technologies, LLC	Connecticut
532	Pentron Corporation	Delaware
533	Pentron Laboratory Technologies, LLC	Connecticut
534	Petroleum Industry Controls, Inc.	Delaware
535	Piccadilly Precision Engineering LTD	United Kingdom
536	Pinnacle Products Inc.	Wisconsin
537	Portescap	Switzerland
538	Portescap Danaher Motion U.K. LTD.	United Kingdom
539	Portescap Danaher Motion U.S. LLC	Delaware
540	Portescap France SAS	France
541	Portescap India Private Limited	India
542	Portescap International	Switzerland
543	Portescap Malaysia SDN. BHD.	Malaysia
544	Portescap Singapore PTE LTD	Singapore
545	Portescap U.S. Inc.	New York
546	Portescap UK LTD	United Kingdom
547	Power Tool Holders Incorporated	Delaware
548	Power Transformer Controls Company	Delaware
549	Precision Gauges, Inc.	Delaware
550	Precision Optics Training Centre Pte Ltd	Singapore
551	Premier Global Search, Inc.	Delaware
552	Prozes und Maschinen Automation GmbH	Germany
553	Qualitrol Company LLC	Delaware
554	Qualitrol Finance Corp.	Delaware
555	Qualitrol GmbH	Germany
556	Qualitrol Holding Company	Delaware
557	Qualitrol Holding GmbH	Germany
558	Qualitrol Instruments Ltd.	United Kingdom
559	Qualitrol Instruments SA	Brussels
560	Quality Wire Processing, Inc.	Delaware
561	R. Jung GmbH	Germany
562	Radiometer (UK) Ltd.	United Kingdom
563	Radiometer America Inc.	Delaware
564	Radiometer Analytical S.A.S.	France
565	Radiometer Australia Holding Pty Ltd	Australia
566	Radiometer Basel AG	Switzerland
567	Radiometer Canada LP	Ontario
568	Radiometer Finance Corp.	Delaware
569	Radiometer Finans A/S	Denmark
570	Radiometer GmbH	Germany
571	Radiometer Iberica S.A.	Spain
572	Radiometer Inc.	Delaware

573	Radiometer Ireland Ltd.	Ireland
574	Radiometer K.K.	Japan
575	Radiometer Ltd.	United Kingdom
576	Radiometer Medical ApS	Denmark
577	Radiometer Medical Equipment (Shanghai) Co. Ltd	China
578	Radiometer Medical Sales Pty. Ltd.	Australia
579	Radiometer Nederland B.V.	Netherlands
580	Radiometer Pacific Ltd.	New Zealand
581	Radiometer Pacific Pty. Ltd.	Australia
582	Radiometer RSCH GmbH	Switzerland
583	Radiometer S.A.S.	France
584	Radiometer s.r.o.	Czech Republic
585	Radiometer Spolka z.o.o.	Poland
586	Raven Acquisition ApS	Denmark
587	Raytek Corporation	California
588	Raytek Do Brasil LTDA	Brazil
589	Raytek GmbH	Germany
590	Raytek Investments LTD (Mauritius)	Mauritius
591	R-Can Environmental Inc.	Ontario
592	Robin Electronics LTD	United Kingdom
593	Saner Linx Beschriftungstechnik	Switzerland
594	SDS Canada Partnership Limited	Nova Scotia
595	SDS de Mexico, S.A. de C.V.	Mexico
596	SDS Dental Holdings Company	Nova Scotia
597	SDS Kerr Co., Limited	Thailand
598	Sea-Bird Electronics, Inc.	Washington
599	Securaplane Technologies, Inc.	Arizona
600	Sendx Medical Inc.	Delaware
601	Senstronics Holdings Limited	United Kingdom
602	Senstronics Limited	United Kingdom
603	Service Station Products Company	Delaware
604	Setra Systems, Inc.	Massachusetts
605	Shanghai Safa Plating Co. LTD	China
606	Shanghai Safe Plastic Cement Co. Ltd.	China
607	Shanghai Safu Machinery Hardware Co. Ltd.	China
608	Shanghai Sata Tools Machinery Manufacturing Co. Ltd.	China
609	Shanghai Shilu Instrument Co. Ltd.	China
610	Sheriff Acquisition Company	Illinois
611	Shirokusa Dental Supply Works	Japan
612	Societe Civile Immobiliere	France
613	Socodent S.A.S.	France
614	Sonix Inc.	Virginia
615	Sonix K.K.	Japan
616	Sonix Technologies SDV.BHD.	Malaysia
617	SpofaDental a.s.	Czech Republic
618	Stampede Acquisition Limited	United Kingdom
619	SunBank de Mexico, S.de RL de CV	Mexico
620	SunBank Family of Companies, LLC	California
621	Superior Electric Holding Group LLC	Delaware
622	Surgipath Canada, Inc.	Canada
623	Surgipath Europe Limited	United Kingdom
624	Surgipath Medical Industries, Inc.	Illinois
625	Swiss Precision Parts Corp.	Delaware
626	SWL Management GmbH	Germany
627	Sybron Alberta Limited	Alberta
628	Sybron Canada Funding Limited Partnership	Nova Scotia
629	Sybron Canada General Partner Company	Nova Scotia
630	Sybron Canada Holdings, Inc.	Delaware
631	Sybron Canada Limited Partner Company	Nova Scotia
632	Sybron Canada Limited/Sybron Canada Limitee	Ontario
633	Sybron Dental Specialties Japan, Inc.	Japan
634	Sybron Dental Specialties, Inc.	Delaware
635	Sybron Implant Solutions Corporation	Ontario
636	Sybron Implant Solutions GmbH	Germany
637	Sybron Implant Solutions Pty Ltd.	Australia

638	Sybron Implant Solutions UK Limited	United Kingdom
639	TECNA Srl	Italy
640	Tektronix AB	Sweden
641	Tektronix (Barbados) Limited	Barbados
642	Tektronix (China) Co., Limited	China
643	Tektronix (India) Private Ltd.	India
644	Tektronix Analysis Software, Inc.	Oregon
645	Tektronix Asia, Ltd.	Oregon
646	Tektronix Berlin G.m.b.H. & Co. KG	Germany
647	Tektronix Berlin Verwaltungs G.m.b.H.	Germany
648	Tektronix Bristol Limited	United Kingdom
649	Tektronix Cambridge Limited	United Kingdom
650	Tektronix Canada Inc.	Ontario
651	Tektronix China Business Trust	China
652	Tektronix China Holdings Ltd.	Cayman Islands
653	Tektronix China Investments Ltd.	Cayman Islands
654	Tektronix Communications Engineering S.R.L.	Moldova
655	Tektronix Development Company	Oregon
656	Tektronix Engineering Development (India) Private Limited	India
657	Tektronix Española SA	Spain
658	Tektronix Export, Inc.	Oregon
659	Tektronix Federal Systems, Inc.	Oregon
660	Tektronix Finance Limited	United Kingdom
661	Tektronix G.m.b.H.	Germany
662	Tektronix GESELLSCHAFT m.b.H.	Austria
663	Tektronix Holland B.V.	Holland
664	Tektronix Hong Kong Limited	Hong Kong
665	Tektronix IC-DISC Inc.	Delaware
666	Tektronix Inc.	Oregon
667	Tektronix Industria Comercio Ltda	Brazil
668	Tektronix International GmbH	Switzerland
669	Tektronix International Inc.	Oregon
670	Tektronix International Sales GmbH	Switzerland
671	Tektronix Japan Ltd.	Japan
672	Tektronix Korea, Ltd.	Korea
673	Tektronix Netherlands Holding B.V.	Netherlands
674	Tektronix Network Systems GmbH	Germany
675	Tektronix Network Systems Pty Ltd	Australia
676	Tektronix Oy	Finland
677	Tektronix Padova S.p.A.	Italy
678	Tektronix S.A.	France
679	Tektronix S.p.A.	Italy
680	Tektronix SA de C.V.	Mexico
681	Tektronix Southeast Asia Pte Ltd.	Singapore
682	Tektronix Taiwan, Ltd	Taiwan
683	Tektronix Texas, LLC	Delaware
684	Tektronix U.K. Holdings Limited	United Kingdom
685	Tektronix U.K. Limited	United Kingdom
686	Tenzen Limited	United Kingdom
687	Tfe Techniques et Fabrication Electroniques SAS	France
688	The Allen Manufacturing Company	Delaware
689	The Anglodent Company	United Kingdom
690	Thomson 60 Case LLC	Delaware
691	Thomson Barnstaple Limited	United Kingdom
692	Thomson Bay Company LLC	Delaware
693	Thomson Industries S.de R.L. de C.V.	Mexico
694	Thomson Industries, Inc.	New York
695	Thomson International Holdings LLC	Delaware
696	Thomson Micron LLC	New York
697	Tianjin Danaher Motion Co. Ltd.	China
698	Tollo Linear AB	Sweden
699	Trojan Investment Company LP	Ontario
700	Trojan Technologies	Ontario
701	Trojan Technologies Deutschland GmbH	Germany

702	Trojan Technologies Espana S.L.	Spain
703	Trojan Technologies ULC	Ontario
704	Trojan Technologies, Inc.	Georgia
705	Trojan US Holdings Inc.	Delaware
706	Trojan UV Holdings Corp.	Delaware
707	TrojanUV Technologies UK Limited	United Kingdom
708	Truck Storage Incorporated	Delaware
709	U.S. Peroxide LLC	Delaware
710	UAB Autotank	Lithuania
711	Universal Technic SAS	France
712	Utica Holding Company	Delaware
713	Veeder-Root Company	Delaware
714	Veeder-Root Do Brasil LTDA	Brazil
715	Veeder-Root Environmental Systems, Ltd.	United Kingdom
716	Veeder-Root Finance Company	United Kingdom
717	Veeder-Root Finance GmbH	Germany
718	Veeder-Root GmbH	Germany
719	Veeder-Root Holding GmbH	Germany
720	Veeder-Root Ltd.	United Kingdom
721	Veeder-Root Petroleum Shanghai	China
722	Venture Measurement Company LLC	Delaware
723	Verigard LLC	Delaware
724	Verwaltungs- und Beteiligunggesellschaft Bach GmbH	Germany
725	VFS (USA) Trading Inc.	Delaware
726	VI Holdings PTY LTD	Victoria
727	Victory Acquisition Ltda.	Brazil
728	VIDA Employee Trust Limited	United Kingdom
729	VIDA Group Limited	United Kingdom
730	Videojet Beteiligungs GmbH	Germany
731	VideoJet do Brazil	Brazil
732	Videojet GmbH & Co KG	Germany
733	Videojet Guangzhou Packaging Equipment Co Ltd.	China
734	Videojet K.K.	Japan
735	Videojet Technologies (2006) LTD	United Kingdom
736	Videojet Technologies (Asia HQ) Pte Ltd	Singapore
737	Videojet Technologies (CP) LTD	United Kingdom
738	Videojet Technologies (I) Pvt. Ltd	India
739	Videojet Technologies (S) PTE. LTD.	Singapore
740	Videojet Technologies (Shanghai) Co., Ltd.	China
741	Videojet Technologies B.V.	Netherlands
742	Videojet Technologies Canada L.P.	Canada
743	Videojet Technologies Europe B.V.	Netherlands
744	Videojet Technologies GmbH	Germany
745	Videojet Technologies Inc.	Delaware
746	Videojet Technologies JSC	Russia
747	Videojet Technologies LTD	United Kingdom
748	Videojet Technologies PTE. LTD. (Asia HQ)	Singapore
749	Videojet Technologies S.A.S.	France
750	Videojet Technologies S.L.	Spain
751	Videojet Technologies S.L.—Sucussal em Portugal	Portugal
752	Videojet Technologies SP z.o.o.	Poland
753	Videojet Technologies Suisse GmbH	Switzerland
754	Videojet Technologies Urun Kodlama ve Etiketleme Danismanlik ve Tic. LTD. STI	Turkey
755	Videojet Technologies Urun Kodlama ve Etiketleme Danismanlik ve Ticaret Limited Sirketi	Turkey
756	Videojet Verwaltungs GmbH	Germany
757	Vision BioSystems (Europe) LTD	United Kingdom
758	Vision Finance Corporation PTY LTD	Victoria
759	Vision IP PTY LTD	Victoria
760	Vision Properties PTY LTD	Victoria
761	Vision Systems PTY LTD	Victoria
762	Visual Networks Italia S.r.l.	Italy
763	VSE Holdings PTY LTD	Victoria
764	VSL (UK) Holdings	United Kingdom

765	VSL Group Holdings PTY LTD	Victoria
766	VSL Invest Subco 1 PTY LTD	Victoria
767	VSL Investments LLP (Limited Partnership)	Australia
768	VSL R&D Subco 2 PTY LTD	Victoria
769	VSL R&D Subco Pty Ltd	Australia
770	Wermex Corporation	Texas
771	West Instruments Ltd.	United Kingdom
772	Western Pacific Industries Inc.	Delaware
773	WIL N.V.	Netherlands Antilles
774	Willett America Inc.	Texas
775	Willett GmbH	Germany
776	Willett Holdings B.V.	Netherlands
777	Willett Industriessysteme Handelgsges.mbH	Austria
778	Willett International Limited	United Kingdom
779	Willett Korea Co., Ltd.	Korea
780	Willett Limited (Thailand)	Thailand
781	Willett Overseas Limited	United Kingdom
782	Willett S.A. (Uruguay)	Uruguay
783	Willett Srl	Italy
784	Zhuhai FTZ Videojet CIJ TEchnologies CO. LTD	China
785	Zhuhai S.E.Z. Videojet Electronics Ltd.	China
786	Zhuji Jacobs Vehicle Systems Co. Ltd.	China
787	Zibo Kehui Electric Co. LTD	China
788	Zipher Limited	United Kingdom
789	Züllig AG	Switzerland
790	Züllig GmbH	Germany

Source: Company Materials

Annex 3: Percentage of the Total Annual Revenues Attributable to Each of the Four Operation Platforms

Segment	2008	2007	2006
Professional Instrumentation	38 %	32 %	31 %
Medical Technologies	26 %	27 %	23 %
Industrial Technologies	26 %	29 %	32 %
Tools & Components	10 %	12 %	14 %

Source: Company Materials, adapted after Annual Report 2008

Annexes 4 - 7 : Components of Sales Growth for Each of Danaher's Operation Platforms
Source: Company Materials

Annex 4: PROFESSIONAL INSTRUMENTATION

	2008 vs. 2007	2007 vs. 2006
Existing businesses	4.0 %	6.5 %
Acquisitions	**32.0 %**	**12.0 %**
Currency exchange rates	1.5 %	3.5 %
Total	37.5 %	22.0 %

Annex 5: MEDICAL TECHNOLOGIES

	2008 vs. 2007	2007 vs. 2006
Existing businesses	4.5 %	8.0 %
Acquisitions	**2.0 %**	**22.0 %**
Currency exchange rates	3.0 %	5.0 %
Total	9.5 %	35.0 %

Annex 6: INDUSTRIAL TECHNOLOGIES

	2008 vs. 2007	2007 vs. 2006
Existing businesses	1.5 %	1.5 %
Acquisitions	**-**	**0.5 %**
Currency exchange rates	2.0 %	3.5 %
Total	3.5 %	5.5 %

Annex 7: TOOLS & COMPONENTS

	2008 vs. 2007	2007 vs. 2006
Existing businesses	3.5 %	0.5 %
Acquisitions	**-**	**1.0 %**
Currency exchange rates	0.5 %	0.5 %
Total	3.0 %	1.0 %

Annex 8 and 9: Danaher Financial Data on 2007 and 2006 Acquisitions

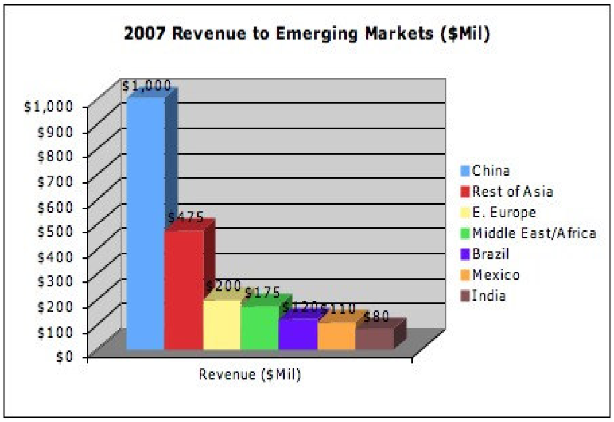
Significant 2007 Acquisitions *($ in thousands)*	**Tektronix**	**ChemTreat**	**All Others**
Accounts receivable	149,315	33,982	16,902
Inventory	181,753	6,541	19,042
Property, plant and equipment	185,567	10,655	5,981
Goodwill	1,874,578	330,847	250,048
Other intangible assets, primarily customer relationships, trade names and patents	720,000	72,000	92,263
In-process research and development	60,400	—	—
Refundable escrowed purchase price	48,504	—	—
Accounts payable	35,919	11,468	10,230
Other assets and liabilities, net	401,308	17,891	1,219
Assumed debt	—	—	3,781
Net cash consideration	2,782,890	424,666	369,006

Significant 2006 Acquisitions *($ in thousands)*	**Sybron Dental**	**Vision**	**All Others**
Accounts receivable	103,335	24,165	15,941
Inventory	108,777	24,709	3,369
Property, plant and equipment	91,769	20,703	3,916
Goodwill	1,523,348	356,967	129,511
Other intangible assets, primarily customer relationships, trade names and patents	686,900	102,003	76,546
In-process research and development	—	6,500	—
Accounts payable	31,744	8,816	9,497
Other assets and liabilities, net	286,090	96,189	6,921
Assumed debt	181,671	1,496	—
Net cash consideration	2,014,624	428,546	212,865

Source: Danaher Corp. Internal Files

Annex 10: Danaher Platforms, *Source: Adapted after www.danaher.com*

Platforms	Main Markets	Niche Markets	Main Acquisitions	Plants
Professional Instrumentation	Environ-mental - Water quality		1996 American Sigma 1998 Dr. Lange 1999 Hach Company 2002 Viridor Instrumentation 2004 Trojan Technologies 2007 ChemTreat, Inc.	North America, Europe, Asia
	- Retail petroleum		1985 Veeder-Root 2001 Red Jacket 2002 Gilbarco 2008 Autotank Ltd.	North America, Europe, Asia, South America
	Test and Measurement		1998 Fluke Corporation 2007 Tektronix, Inc.	North America, Europe, Asia
Medical Technologies	Dental		2004 Gendex 2004 KaVo 2006 Sybron Dental Specialties	Europe, North America, South America
	Acute Care		2004 Radiometer	Europe, North America
	Pathology Diagnostics		2005 Leica Microsystems 2006 Vision Systems Limited 2008 Surgipath Medical Ind. 2008 CoreTech	Europe, Australia
	Life Sciences Research		2005 Leica Microsystems	Europe, US Australia, Asia,
Industrial Technologies	Product Identification		2002 Videojet 2003 Willett International Ltd. 2003 Accu-Sort Systems Inc. 2005 Linx Printing Techn.	US, Europe, South America, Asia
	Motion		1998 Pacific Scientific Comp. 2000 American Precision Ind. 2000 Kollmorgen Corp. 2000 Warner Electric Comp. 2002 Thomson Industries	US, Europe, Latin America, Asia
		Aerospace & Defense	1998 Pacific Scientific 2000 Kollmorgen	
		Sensors &Controls		US, Europe, Asia, Latin Am.
Tools & Components	Mechanics' Hand Tools			US, Asia
		Delta Consoli-dated Ind.		US, Asia
		Hennessy Ind.		US, Asia
		Jacobs Chuck		US, Asia
		Jacobs Vehicle		US, Asia



Annex 11: "2007 Revenue to Emerging Markets ($ Mil)"
Source: Company Materials

Annex 12: Research and Development Expenditures Over Each of the Last Three Yars, by Sgment and in the Agregate ($ in millions)"

Segment	2008	2007	2006
Professional Instrumentation	375	272	174
Medical Technologies	190	168	123
Industrial Technologies	148	150	133
Tools & Components	12	11	10
Total	**725**	**601**	**440**

Source: Danaher Corp., Annual Report 2008

Annex 13: Employee FAQ Distributed to Employees of Visual Networks, Inc.

Filed by Danaher Corporation
Pursuant to Rule 14a-12
Under the Securities Exchange Act of 1934
Subject Company: Visual Networks, Inc.
Commission File No.: 000-23699

Employee FAQ Distributed to Employees of Visual Networks, Inc.

[FLUKE NETWORKS GRAPHIC APPEARS HERE]

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1. **What is being announced?** Fluke Corporation, one of the Danaher Corporation family of companies, has announced today that it has entered into a definitive agreement to purchase Visual Networks, Inc. (NASDAQ: VNWK) for an approximate purchase price of $75 million. Visual Networks will become a part of Danaher's Fluke Networks business after closing.

2. **Who is Fluke Networks?** Part of the Danaher family of companies, Fluke Networks is a recognized global leader in solutions for the testing, monitoring and analysis of enterprise and telecommunications networks and the installation and certification of the fiber and copper forming the foundation for those networks. The company's comprehensive line of Network SuperVision™ Solutions provide network installers, owners, and maintainers with superior vision, combining speed, accuracy and ease of use to optimize network performance.

   Profitable since its inception in 2000, Fluke Networks sells and supports its products in more than 50 countries. Headquartered in Everett, Washington, Fluke Networks has major facilities in California, Colorado, Georgia, Ohio, New Jersey and Texas, a pan-European marketing and customer interaction center in the UK and sales offices worldwide.

3. **Is Fluke Networks different from Fluke Corporation?** Yes. Both are part of the Electronic Test Platform, but they are separate operating entities within Danaher.

4. **What does Fluke Networks do?** Fluke Networks' Network SuperVision Solutions™ include products and services aimed at public and private network owners, installers and maintainers, from cable testing products to broadband data services equipment to Ethernet and IP monitoring and analysis software and hardware. The company has two main businesses. The first is Enterprise and Datacom, dealing with the installation and certification of both copper and fiber networks, and the ongoing management of the network. The other is Communications Service Provider (CSP), which services the telecom/outside plant markets. Visual Networks will become part of the Datacom and Enterprise group of Fluke Networks after closing.

   Key Fluke Networks' product lines in the enterprise space are the OptiView™ family of network Distributed Network Analysis products, including the OptiView™ Integrated Network Analyzer and the OptiView™ Link Analyzer, OptiView™ Workgroup Analyzer and OptiView™ WAN Analyzers. Other major products are SuperAgent Application Performance Analyzer and ReporterAnalyzer NetFlow analysis tool. Fluke Networks also makes portable network analysis tools such as EtherScope™ Network Assistant and NetTool™ Inline Tester.

5. **Why is Fluke Networks acquiring Visual Networks?** This is a significant addition to Fluke Networks business and supports FNET's vision of how to serve enterprise customers going forward. Combining the strengths of Fluke Networks and Visual Networks, two companies with industry leading solutions and recognized brands, will make Fluke Networks an even more valued resource for our customers. We will maintain Visual Networks' expertise in the managed services market, and add Fluke Networks' understanding of how enterprises manage application LAN performance.

6. **What will this acquisition mean to Visual Networks customers?** Customers have come to expect solid support from Visual Networks and its channel partners, and can continue to do so from Fluke Networks, a company well-known for providing world-class service. Fluke Networks is committed to a seamless transition period during which current Visual Networks customers should see no difference in support, sales or product availability.

7. **How will the two companies be integrated?** An integration team made up of Fluke Networks, Fluke Corp. and Visual Networks associates will be formed. This team will work through all issues relating to the integration of Visual Networks' personnel, operations and systems, marketing, product development and sales post-closing.

8. **Will Visual Networks' operations remain at its existing locations?** Currently, we envision keeping Visual Networks' existing headquarters in Rockville as well as their other locations. There are, however, many factors to be considered, so exact details will not be known until we begin to work with the Visual Networks team and understand how to best integrate the two organizations after the transaction is completed. We expect to work through this over the next several weeks and will communicate once any decisions are made.

9. **How will Visual Networks products be sold?** There are likely to be few changes in the way Visual Networks products are sold, as the sales organizations of the two companies are largely complementary. The combination of VARs, master distributors and service providers adds a new and beneficial dimension to FNET's sales capabilities. The integration teams will be evaluating what, if any, changes may be made in the future, but in the meantime current Visual Networks contacts remain the same.

10. **Will there be any changes to the way existing customers receive technical support on Visual Networks products?** Not immediately. Visual Networks' customers will continue to interface with Visual Networks' sales and technical support organization in the way they do today. As we continue our integration planning, we will determine the best way to serve customers long-term, but maintaining solid support is critical during the transition period and beyond. The same contact support processes and methods (phone, email, fax) will be used. If there are any changes to contact methods such as email addresses, there will be notification in advance.

11. **Am I now officially a Fluke Networks employee?** No, not until the transaction is completed. While Visual Networks and Danaher have signed a definitive agreement approving the acquisition of Visual Networks by Fluke Networks, closing is not expected until the first quarter of 2006.

12. **Does this mean I am guaranteed a permanent position with Fluke Networks?** Unfortunately, no. As previously stated, the Visual Networks and Fluke Networks leadership teams will be working together to build the best combined organization. We see the two organizations as largely complementary and will be working expeditiously to resolve any areas of overlap and communicate to all employees.

13. **What about my benefits?** In order to ensure that all current employees are guaranteed uninterrupted benefits coverage during this transition we will immediately begin preparing for the enrollment of all Visual Networks employees into the Danaher benefits program. At closing, all Visual Networks employees will become Fluke Networks employees and be fully covered under the Danaher benefits program. Your years of service with Visual Networks will be credited for purposes of time off and retirement planning.

14. **Will our benefits change?** Yes. Kurt Loring, Fluke Networks' VP of Human Resources and members of his team will be providing details on all benefits including medical, dental and vision coverage, insurance options, 401K etc. Kurt will be on site in Rockville on December 5 to give an initial overview on benefits and will return with his team on December 14 to answer questions in depth and ensure all employees are effectively transferred to the new plan.

15. **Will our compensation change?** You will be given an offer letter at the time of closing which will clearly articulate your compensation. Fluke Networks will not alter compensation without first doing a comprehensive review of positions and scope of authority. Therefore at this time we do not foresee changes.

16. **Has Fluke Networks done acquisitions before and how were those handled?** Fluke Networks has averaged about one acquisition a year since becoming a separate operating company within Danaher in 2000, and each acquisition comes with its own unique circumstances. Two of the previous acquisitions, Microtest and LoopExpert, for example, each had different outcomes, but both were successful in terms of business performance. In Microtest's case, market conditions and the nature of the acquisition (a key competitor, with significant product overlap), led to all Microtest facilities being closed, but many key Microtest employees remain with Fluke Networks to this day. In the case of LoopExpert, however, which was largely complementary to Fluke Networks, all the LoopExpert locations in New Jersey, Georgia and Ohio remain open and most LoopExpert employees remain with Fluke Networks.

    Fluke Networks' most recent acquisition was the Tools and Test Sets and Access Test and Measurement divisions of Harris Corporation. This resulted in the retention of nearly all acquired associates and addition of many successful telecom products to Fluke Networks line.

17. **What methods are used to disseminate company information to all employees?** Fluke Networks and Danaher both use the web as their primary employee communication vehicles. Access to the intranet sites will be available to employees after closing. In the meantime, we will be communicating with you via email, webcasts and meetings.

18. **How can I get more information about this acquisition, Fluke Networks and Danaher?** Chris Odell, President of Fluke Networks, will be on site in Rockville Monday, December 5, to host an all-employee meeting. He will be accompanied by members of his staff who will be involved in the integration You can also look at our company website, www.flukenetworks.com as well as the website of our corporate parent, Danaher www.danaher.com.

Source: Company Materials

Annex 14: Employee FAQ Distributed to Employees of Microtest

[Microtest Letterhead] **[Fluke Networks Letterhead]**

We're excited about the prospect of merging the best of both of our great companies. In the coming months, we'll get to know each other's businesses and products better, and we'll get to know each other better as well. In the meantime, this Q&A format will serve as an introduction to Fluke Networks and to some of the changes you can expect as you transition to become important members of the Fluke Networks team.

1. Do I still have a job based on this announcement?
Microtest does not anticipate any additional reductions prior to the sale being finalized. The success of this merger will greatly depend upon the talent currently in place. Of course, as we move forward Fluke Networks will evaluate those areas where redundancies may occur and make decisions as appropriate. Both companies' goal is to minimize disruption, to the degree possible, in your jobs.

2. What will happen to our office - will we stay here, or will we have to move?

There are no plans to re-locate you anywhere. As we have mentioned, Fluke Networks values the talent and quality of the employees and there is no intention to disrupt that asset.

3. What about policies and rules of work. Will they change?
At this point in time, we do not anticipate any changes. Fluke Networks will need time to evaluate Microtest's existing policies and practices. We expect this process to take several months.

4. Will we be changing our benefits programs and pay schedules?
Until the sale is finalized, your benefits and pay schedules will stay the same. Changes may occur after the transaction is closed. Fluke Networks' open enrolment normally occurs in November of each year.

5. What kind of benefits does Fluke Networks offer their employees, and will that change for the next open enrolment period?
Fluke Networks offers a very comprehensive benefits program with life, AD&D, long term disability, health, dental, vision, a number of other optional benefits and insurance options and a 401k plan with Fidelity. Adjustment to benefits may be made during the next open enrolment period.

6. What about my pay?
Will my classification or pay rate change? After the transaction is closed, Fluke Networks will evaluate what you do and will compare programs to understand differences between Microtest classifications and FNET's prior to blending compensation and classification plans.

7. Microtest was a standalone public company, and now it is being held by a larger corporation. I used to participate in an employee stock purchase program, and I had stock options granted to me. Now what?
When the transaction is closed, your stock will be cashed-out. You should receive payment for the stock you held when Fluke Networks purchased the company based upon the agreed-upon price per share on the purchase date. Fluke Networks does have an FNET specific stock option program, but it is much different because Fluke Networks is an operating subsidiary of Danaher Corporation (NYSE: DHR). Stock options are used as an incentive vehicle for employees.

8. What happens to my vacation and sick leave?
Your service time with Microtest will transfer to FNET. Vacation and sick leave that you have accrued will stay intact. You will remain on your existing vacation and sick leave plan until January of 2002. In the meantime, Fluke Networks will review your current plans, and anticipate transferring you onto their plans as of 1/02. Over the next several months, you will be learning much more about Fluke Networks' benefits plans.

9. What's it like to work for Fluke Networks?
In a recent employee survey, over 90% of FNET's employees agreed that they'd recommend FNET as a good place to work. In the same survey, 90% of employees agreed that FNET's management is interested in the well being of its employees. The culture here is informal and fun, but highly committed to quality and winning in our markets.

10. How will competing products on the market today be handled?
Due diligence confirmed that the offerings of the two companies are complementary. While we both have products that certify copper and fibre structured cabling, our organizations have typically marketed to different customers: Microtest has a heavy contractor base and FNET has successfully marketed to the end user. Microtest's recent launch into the residential market and FNET's recent launch into the outside plant are perfect examples of how the two companies have grown in different, complementary directions.

11. Will we attempt to make existing products integrate in any way?
There may be a number of areas where we can jointly form a strong presence in the market by making products compatible. One area we immediately recognize is the records-management software area.

12. I'm a Microtest direct sales person and I know that Fluke Networks has direct people in the U.S. Do I still have a job?
We are looking for good people to carry the message of the power and value the new merged Microtest plus Fluke Networks organizations brings to the market. In this case, 1+1 will be greater than 2! After the transaction has closed, Fluke Networks will undertake a careful but rapid evaluation of all sales personnel in both organizations to determine where the best fits are. Your help will be needed to do this.

Through this evaluation, we are confident new organizational opportunities will surface and the goal is to fit people into the jobs that best fit their skills and desires.

13. Where are Fluke Networks' employees located?
In North America, Fluke Networks is located in Everett, WA. (worldwide headquarters), Colorado Springs, CO., Boston, MA., Austin and Dallas, TX, and in field offices throughout the US and Canada. FNET has international employees located throughout Europe, and Asia and Latin America. Worldwide, Fluke Networks has over 400 employees.

14. How will we communicate with other FNET employees?
Both companies will jointly appoint a transition team that will be comprised of selected employees from your facility, and some key employees from Fluke Networks' Corporate and Business Unit groups. Communications will occur as a result of the work that is done cooperatively. You may also receive communications from some of the following:

From Microtest:
Vince Hren, President and CEO
Bill Crowell, VP and CFO
David Coffin, VP and GM, NTM Division
Julie Jones, HR Director

From Fluke Networks:
Chris Odell, President
Mark Kuhn, CFO
Bill Dunn, VP of Marketing and E-Business

Bill Moore, Director Worldwide Sales
Will Ott, Infrastructure SuperVision Business Unit Manager
Pat Donahoo, Infrastructure SuperVision Engineering Manager
Carol Kowalski, HR Director
Deb Buerkle, HR/Comp & Benefits Manager

15. When might we get the chance to meet the people?
As we work through the details of integration, people will be identified and travel plans arranged for visits to each site. A few of you know some of the key contributors already from standards committees, domestic and international.

16. Who is Danaher Corporation, and why are we hearing about this company?
Danaher Corporation (NYSE: DHR) is Fluke Networks' parent company. Danaher owns 50+ companies worldwide and employs more than 24,000 employees. Fluke Networks' President, Chris Odell, reports to the Danaher CEO, Larry Culp.
For more information about Danaher, please go to www.danaher.com.

17. I hear Fluke Networks use the term "Network SuperVision" a lot, and see it in your ads. What is that supposed to mean?
Network SuperVision is the expression of Fluke Networks' brand promise to our customers. When Fluke Networks says Network SuperVision, it's promising customers three things that are unique about FNET solutions:

- Give our customers more ways to look at their networks (e.g. either via hardware or software solutions; from LAN to WAN; from physical layer to application layer; via distributed or portable solutions).

- Show the customer a view into his network that he won't get anywhere else (examples include the Network Front Page of OptiView Integrated Network Analyzer, the "Explorer View" of Network Inspector software, and the switch identification of OneTouch Network Assistant).

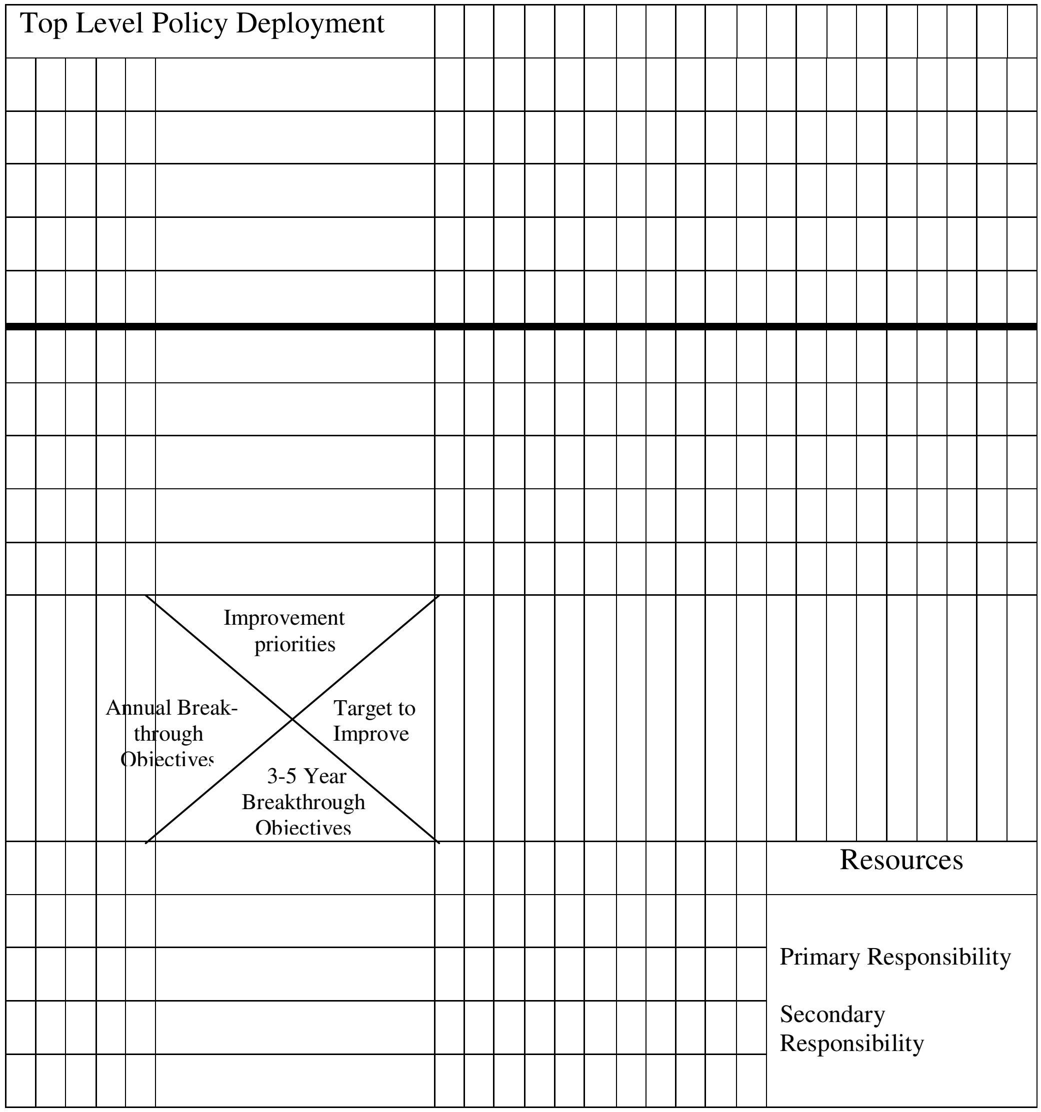
- Solutions uniquely designed to fit the experience level and work model of the user (FNET has pioneered new markets by identifying solutions for the network technician, the help desk technician, as well as engineering category-defining solutions for the network engineer, outside plant technician, and installer).

18. I know I am going to have more questions. Who do I call to get my questions answered?
Please don't hesitate to contact any member of the Microtest Executive Team or your manager. You can expect weekly email updates on the progress of the transaction from Vince Hren.

To find out more about Fluke Networks please check the web-site at www.flukenetworks.com

Source: Company Materials

Annex 14: Example of Top Level Policy Deployment Chart



Source: Company Materials

CV of the Author:

ANDREEA IANAS

DATE OF BIRTH: 7 February 1982

E-MAIL : andreea_ianas@yahoo.de

ADDRESS: 1030 VIENNA, AUSTRIA

PROFESSIONAL EXPERIENCE

Dec 2004 - Feb 2007 **Karpaten Turism** **Romania**

Leading incoming tour operator in Romania

Product Manager

Responsibilities

- Managed a team of 120 people across all areas of the firm (acted as "de-facto" deputy General Manager)
- Booked and coordinated over 600 roundtrips and 700 land excursions for cruise vessels per year
- Developed tourist programs for incoming travelers and promoted them in core target markets (Germany and Austria)
- Opened up new markets, created and maintained valuable contacts in the USA, Switzerland, UK, Australia, France, Spain and other countries
- Organized and managed pre- and post-cruise programs for groups of 1,000+ people
- Negotiated contracts with clients and service providers (consistently achieved savings of +20% on supplier base prices)
- Received and followed up on customer feedback by designing service improvements internally or working with the relevant providers
- Coordinated company attendance and events at the largest international tourism fairs in Germany, Austria, UK, Italy, France and other European countries
- Organized promotional events for the company in Romania and abroad
- Coordinated the company's staff recruiting, designed and implemented training programs

Mai 2003 - Nov 2004 **Karpaten Turism** **Romania**

Guide Coordinator

Responsibilities

- Performed city tours and Romania roundtrips for foreign tourists (USA, UK, Germany, Austria, the Netherlands, Switzerland, Australia)
- Coordinated the company's team of programme directors
- Established valuable contacts with harbour officials and customs departments to ensure the perfect proceeding of tourism handling activities
- Coordinated company attendance and events at the largest international tourism fairs in Germany, Austria, UK, Italy, France and other European countries

EDUCATION

Feb 2007 - June 2009 **Master of International Business Administration**

Austria

University of Vienna, Centre for Business Studies

Focus on International Marketing

- Conducted marketing research studies for T-Mobile, L'Oreal, Gillette and Colgate

Sep 2000 - Jun 2004 **BA in Economics** **Romania**
Academy of Economic Studies Bucharest,
College of Business Administration in Foreign Languages,
German Department

LANGUAGES English (Fluent), German (Fluent), Spanish (Practical), French (Practical), Romanian (Native)

OTHER EXPERIENCE

10.-11.11.2005 Speaker at the „5th Danube Region Business Conference" in Belgrade **Serbia**

2005 – 2006 Trainer for national guiding courses (Irecsson Institute) **Romania**

2007 – 2009 Participated in training programmes organised by Uniworld River Cruises and Scenic Tours **Austria, Germany, Netherlands**

PERSONAL INTERESTS

Latin dances, painting, ice skating, playing the flute, photography

Lebenslauf der Verfasserin:

ANDREEA IANAS

Geburtsdatum: 7. Februar 1982
E-Mail : andreea_ianas@yahoo.de
Adresse: 1030 WIEN, Österreich

BERUFSERFAHRUNG

Dez 2004 - Feb 2007 **Karpaten Turism** **Rumänien**

Führender Incoming Tour Operator am rumänischen Markt

Product Manager

Verantwortungen

- Führung eines Team von 120 Personen
- Erstellung und Umsetzung neuer touristischen Programme
- Identifizierung neuer Märkte und Marktpotentiale
- Ausarbeitung neuer Markstrategien für das Unternehmenswachstum
- Ausbauung von Geschäftskontakten und Aufrechterhaltung von Auslandskontakten mit den wichtigsten Partnern (Österreich, Deutschland, USA, UK, Schweiz, Australien, Frankreich)
- Organisierung von Pre- und Post-Cruise Programmen für Kreuzfahrtschiffe
- Verhandlung von Verträgen mit den Lieferanten
- Organisierung und Leitung von großen Veranstaltungen
- Organisierung der Teilnahme an internationalen Messen in Österreich, Deutschland, UK, Italien, Frankreich

Mai 2003 - Nov 2004 **Karpaten Turism** **Rumänien**

Nationaler Reiseleiter und Leiter eines Teams von 80 Reiseleitern

Verantwortungen

- Reiseleitung für Rundreisen und Städtebesichtigungen für ausländische Touristen (Österreich, Deutschland, Schweiz, UK, USA, Australien)
- Leitung eines Teams von 80 Reiseleitern
- Organisierung der Teilnahme an internationalen Messen in Österreich, Deutschland, UK, Italien, Frankreich

AUSBILDUNG

Feb 2007 - Jun 2009 **Master Internationale Betriebswirtschaft** **Österreich**

Hauptuniversität Wien, Betriebswirtschaftszentrum (BWZ)

Schwerpunkt Internationales Marketing

Durchführung von Marketing Research Studien (T-Mobile, L'Oréal, Colgate, Gillette)

Sep 2000 - Jun 2004 **BA in Betriebswirtschaft** **Rumänien**

Wirtschaftsakademie Bukarest,
Hochschule für Betriebswirtschaftsstudien in Fremdsprachen,
Deutsch-Englische Abteilung

SPRACHEN	Deutsch (sehr gut), Englisch (sehr gut), Spanish Fortgeschritten), Französisch (Anfänger), Rumänisch (Muttersprache)

ANDERE ERFAHRUNGEN

10.-11.11.2005	Sprecher auf der „5th Danube Region Business Conference" in Belgrad **Serbien**
2005 – 2006	Trainer für Nationale Reiseleitungskurse (Irecsson Institute) **Romania**
2007 – 2009	Teilnahme an Traininsprogrammen organisiert von Uniworld RiverCruises und Scenic Tours **Österreich, Deutschland, Holland**

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Declaration for the Master's Thesis

I warrent, that the thesis is my original work and that I have not received outside assistance.

Only the sources cited have been used in this draft. Parts that are direct quotes or paraphrases are identified as such.

Vienna, (date)__________________ ______________________

(signature)