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Competitive Intelligence at Elkem Material;

- Reflection and Evaluation

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ABSTRACT

Organisations must know their competitors to survive in today’s shrinking markets, and an increasing number of companies are adding competitive intelligence (CI) units to their operations. Through CI, organisations can find out what the competitors are up to and stay one step ahead. CI is an approach that employees legal, ethical, and non-fattening methods to gather valuable competitive information. In a confidential study for Elkem Material (EM), seven companies within the Microsilica business were analysed. The importance of self-evaluation, reflection and feedback is very important. As a compliment to the confidential report to Elkem, this open part of the thesis work describes my personal understanding of the work, my reflection towards the working process and a critical evaluation of the process and the result.

Key Words:

Competitive Intelligence, CI, Microsilica, Silica Fume, Silica Fume Global market, self-evaluation, reflection, working process.
FOREWORD

Writing this thesis has given me a feeling of “real life”. I have been deeply involved in Elkem ASA Materials working together with top-level management. The management team at Elkem ASA, Materials has been really committed to the responsibility of having a Master student write a thesis regarding their company. The management commitment has been an important factor for successful completion of the thesis, and it has also been an important part of my personal motivation for the work.

The second part of the thesis has given me a great possibility to reflect and try to understand my own and other peoples’ working process. It has given me a deeper understanding of how managers work and what is important to them in their daily office work.

ACKNOWLEDGEMENTS

I would like to thank for the many helpful suggestions and ideas I have received from a large number of workers at Elkem ASA, Materials and others with whom the theoretical framework has been discussed. I would also like to thank the educational centre at Elkem ASA, which helped me getting in touch with Elkem ASA, Materials. I would also like thanking all of the persons who have given me their time, and finally the staff at the university.

Most learning takes place in a social context and without the help from the persons around me, this paper would not have been possible.

CONFIDENTIALITY

A part of this thesis has been written under a secrecy agreement with Elkem ASA, Materials, and is the confidential property of Elkem ASA, Materials. This confidential part is the bases for the reflections and evaluations in the published thesis.
“All the people out there give the impression that business intelligence is nothing more than collection data. It’s unfortunate, because the real value added comes with the intervention of humans.”
-Professor Liam Fahey, Formerly of Boston’s University And Babson College

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“Knowledge is Power”  
- Francis Bacon
1 INTRODUCTION

1.1 Purpose of thesis

Elkem Materials has today a fairly broad understanding of the fundamental behaviour of its competitors in the market. However, the company has identified a need to understand and develop a deeper understanding of the major strategies used by the different competitors. This will be an important factor as Elkem Materials has outlined an aggressive growth strategy, which calls for an increased turnover from MNOK 600 to BNOK 1.2 in the next 5 years period.

The desired outcome of the confidential thesis work is to get a tool that will raise discussions among the managers at EM, and this will again help when revising and verifying Elkem Materials’ competitive strategy as it is today.

The focus of the confidential part is to describe the strategy of the main competitors within the global microsilica market. The areas that will be covered are: Concrete, Refractory, Fibre Cement and Oil Well (WDP)

Understanding the working process is as important as, and maybe even more important than the final result. This part, the public part, of the thesis will reflect upon the method I have been using, the way I have been interacting with Elkem Materials’ employees. I will look at the way we together have developed a platform for the mapping of the market and, finally, how the company will benefit and use part one of the thesis.

1.2 Limitation of thesis

Working with competitive intelligence is a very demanding job, demanding in terms of the amount of information that is required to obtain a complete picture. When you have reached a level where a picture of the situation has been created, you will have to continue to keep the system updated, add new information, restructure old information etc. to make sure it is always “one step ahead of the market/the competitors”.

As competitive intelligence is an ongoing process, we have already limited ourselves a lot by working within a limited period of time. It is worth noticing that none of the companies has been put aside as soon as I got the picture; the information has constantly been updated, until time has not allowed for it anymore.

The dissemination part of the CI cycle will only partly be included in the chapter analysing each company. The reason is that it will not be possible for
me within the limited time available to really recommend Elkem Materials actions in relation to its competitors. In addition, as I would not be able to completely understand the strategy in the four different areas, I would not be able to give a conclusive recommendation.

There are areas that the thesis will not been covering, in spite of this, they may be mentioned but no special attention will be given to them. This limitation may seriously affect the outcome of the thesis.

One of the areas that have not been taken into consideration is logistics. In global competition within the metal industry and especially regarding microsilica, there is a high demand for logistic efficiency. To move microsilica from one side of the world to the other is a very costly.

Furthermore, governmental regulations have not been taken in to consideration; something which also has a very big impact on the production of metal. One political regulation that has a very big impact is related to pollution. In a country like Norway, the regulations are very strict; some of the hardest ones in the world, as compared to a country in South Africa, which has more or less no regulations. Today, it is a competitive advantage for a company not to be governed by strict regulations on pollution. I hope, of course, that this will change and that an emphasis on environmental production will be a competitive advantage. The main problem is the CO$_2$ / SiO$_2$, it is, however, important to notice that there is currently a discussion whether the pollution burden should be placed on the production of microsilica or on the production of the metal.

Other thing that has not been taken into consideration is transit cost, introduction to the Euro, exchange rate, power price etc.

1.3 Methodology of thesis

The confidential part of the thesis will have the form of a case study where the aim is to understand and explain a complex situation within a competitive environment. The thesis will not provide any final solution to the coming strategy, however, I hope it will stimulate to a discussion about competitor’s intention and by that help in developing a superior strategy for the period up to 2006. I hope I will be able to identify important issues and problems, which can then guide managers at Elkem Materials to find good solutions/strategy.

Even when I am studying a particularly case within a very special industry it is my aim to provide the reader with a rich multi-dimensional picture of the situation being studied. The study will try to illustrate relationships, corporate political issues and other patterns of influence.
The objectiveness of this case study is very limited since a lot of the work has been to try to understand competitor behaviour. A lot of the work has, of course, been discussed with other people, who have some experience with the behaviour of the different competitors, but in the end, the thesis represents my understanding of the situation and that may not be an objective understanding. However, as far as possible I will try to limit my subjectivity by using multiple sources.

There are six important sources of evidence used in case studies (D. Remenyi, D. Williams, A. Money & E. Swartz, 1998) and this thesis will be using them all:

1. Documents;
2. Interviews;
3. Direct observations;
4. Participant-observation situation;
5. Physical artefacts;
6. Archival records.

The biggest part of this work will be to collect, systemise and analyse data.

The data collected will include internal and external, first- and second-hand data.

External data will include industry studies, trade associations, trade magazines, business press, company directories and statistical data, government sources, company documents, antitrust records, local newspapers, local tax records, interviews etc.

Internal Data will include interviews, company records, Midas etc.

To be able to make this work available to the Elkem Materials, sources will not be identified, and there will be no sources related to statements within the work of the different companies. As much as possible will be written in “I”-form. However, all sources have been listed at the end of the paper, but without names only with titles.

Competitive Intelligence is by nature a sensitive area to work with. In order to make sure not to disclose any sensitive information to the market, part one of this thesis has been made confidential.

In the public part of the thesis the following areas will be covered:

1. The process of developing and customising the final framework/model
2. The process of gathering information. This part will include a synthesised example. However, the information provided is real, but there is a mix of different companies, so it will not make any sense.
3. How will the company use the finished material and how does it benefit from it
4. Reflections
5. Further studies

The aim with the public part is to be able to guide others that are going to work in the area, especially in cases where they are starting from scratch.

2 ELKEM ASA AND ELKEM ASA, MATERIALS

Elkem is one of the world's leading suppliers of metals and materials. Elkem's main products are ferroalloys, silicon metal, aluminium, carbon and microsilica.

The products are essential in the manufacturing of a wide range of products needed in today's society. Elkem serves the steel, foundry, chemicals, electronics, and aluminium industries.

The Group is one of Norway's largest industrial companies, and is listed on the Oslo Stock Exchange and the Frankfurt Stock Exchange.

The company's operations are based on clean, renewable hydroelectric power, and Elkem itself produces a substantial amount of energy.

2.1 Elkem Materials

Elkem Materials is part of Elkem ASA, and was set up in 1982 to market and promote Microsilica into a variety of industries on a world-wide basis. Elkem Materials markets Elkem Microsilica®, an ultra fine powder created during the production of ferrosilicon and silicon metal. It is used as an additive in building materials, fibre cement and refractory materials. Microsilica was used in the Øresund project, which connects Sweden and Denmark, and by the new Gardermoen airport in Norway. It is also an additive in the concrete coating that encases the pipelines, which transport Norwegian gas from the North Sea to the European continent.

The company also markets manganese oxide products, a powder created during the production of manganese alloys, which is used in refractory materials, ferrites and animal foodstuff. Other products from Elkem Materials include the wear-resistant material Ceramite® as well as gas filters and powder particle treatment installations for the ferroalloys industry and coal-fired power plants.
2.1.1 Elkem Materials operates in the following markets:

- **CONCRETE:** Through research and development, Elkem has discovered several application areas for microsilica; the most common application being as a concrete additive. By adding Elkem Microsilica®, the concrete develops several positive properties: increased strength, water impermeability and resistance to aggressive environments.

- **TUNNEL:** In tunnel excavation it is important not to disturb ground water and any small lakes above. By using GroutAid® additive (microsilica-slurry + specific cements) an environmentally-friendly injection system for waterproofing and stabilising of rock and soil is achieved.

- **REFRACTORY:** Elkem Materials delivers microsilica to the refractory industry. As a raw material in refractory products, microsilica contributes to providing flowability in castables, combined with high impermeability and high strength.

- **FIBRE CEMENT:** Fibre cement is used, among other things, in the production of siding boards and roof sheets. When microsilica is added to fibre cement, health-hazardous asbestos fibers are replaced by harmless fibers. The strength is maintained, but the health problems caused by asbestos products are eliminated.

- **OIL WELL:** Elkem Microsilica® has also found a niche within the oil well industry, not only in concrete platforms, but also as an additive in oil well cement and mud.

Examples of project where Elkem Materials has played an important role:

![Figure 1 Storebælt – Denmark](image1)

![Figure 2 Tsing Ma Bridge - Hong Kong](image2)
3 INTRODUCTION TO TOPIC

“It is pardonable to be defeated, but never to be surprised.”

Fredrick the Great

Increasingly, management strategists are relying on a frequently misunderstood practice known as Competitive Intelligence (CI) (Miller). From out of the shadows of corporate “spy vs. spy” stereotypes, today’s professionals are legally and ethically collecting, analysing, applying information about the capabilities, vulnerabilities, and intentions of their competitors, and monitoring developments within the overall competitive environment.

The goal is then, of course, actionable intelligence that will provide a competitive edge for Elkem Materials. By analysing rivals’ moves, CI will allow Elkem Material (EM) to anticipate market developments, rather than merely react to them. The big “payoff” is that it will point out weaknesses that they have internally because of the strength of their competitors.

“I can’t imagine a time in history when the competencies, skills and knowledge of the men and women in competitive intelligence are more needed and more relevant to a company being able to design a winning strategy and act on it. I can’t imagine a company not realising the fundamental need for this today”

-John Pepper
(Chairman of Procter & Gamble)

3.1 Competitive intelligence

Competitive intelligence is the process of monitoring the competitive environment. To be more exact, CI is a systematic and ethical program for gathering, analysing, and managing information that can affect a company’s plans, decisions, and operations (Kahaner, 1996).

When all comes to all, CI has five main different purposes (Kelly, 1987).
1. Holding Market Share
2. Increasing Your Market Share
3. Learning about The Competitor’s Strengths and Weaknesses
4. Preparing for Contingencies
5. Learning from Competitors
CI is a method to monitor changes, and as such it cannot be an isolated event, but must be a continues process. In -cases as the thesis, the CI is a time-limited event, but I will, of course, recommend EM to continue the work on a professional basis. There is today some sort of CI done within EM, but as far as I can see, it is very limited and it lacks structure and an analytical tool to really obtain an understanding of the different competitors. Below some of the most common and efficient tools are presented.

Figure 3 Most used tools for analysing CI information in % (The Pine Ridge Group, INC & T.W. Powell Company, 1998)

Figure 4 Most efficient tools used to analyse CI information in % (The Pine Ridge Group, INC & T.W. Powell Company, 1998)
As may be seen from the two figures, the most efficient tool is not necessarily the one that is most used. The reason for this is, based on my own experience that is very difficult to make a good SWOT analysis; you need to obtain a lot of information and really understand the competitors and the market.

### 3.2 A Framework for the Competitor Intelligence work

The goal of this thesis is to map the strategies of the different competitors that have been selected. The objective is to develop a profile of the nature and success of the strategy most likely to be used by each competitor. A sophisticated analysis of the competitors is needed to answer such questions as “whom should we pick a fight with in the industry, and with what sequence of moves?” “What is the meaning of that competitor’s strategic move and how seriously should we take it?” and “What areas should we avoid because the competitor’s response will be emotional or desperate?” (Porter, 1998).

The basic unit of a competitive intelligence system is the intelligence cycle (Kahaner, 1996). It is the process by which raw information is turned into intelligence.

There are only four steps in this process, and most authors tend to agree on them. They include authors like L. Kahaner (1996), L. M. Fuld (1985), J. M. Kelly (1987) and many more. The steps are the following:

1. Planning and Direction: This is the step when management gets involved and decides what kind of intelligence it requires. In this thesis, Planning and Direction are represented in the first part from Purpose to Methodology.
2. Collection: This part in the actual gathering of raw information from which intelligence will be produced. Starting here, in this case with the first company presented, this, of course, just gives a summary of all the information collected where I have tried to pick out the most important parts. The literature, however, does not give me a proper tool for this information gathering. Therefore, we will be using a model from Porter adjusted to my needs for this part of the work.
3. Analysis: This is generally considered the most difficult part of the intelligence cycle, and you will find it at the end of each company chapter. In addition, at the end of the paper, you will find an analysis of the competitive market.
4. Dissemination: This is the last step (and the first, too) in the cycle, and involves distributing the intelligence product to the persons that requested it. It is the time when the analyst will suggest a possible course of action based on this work. Part of this will be included in the part of the paper where I analyse the information obtained. However, it will not really be covered. For more, see limitations regarding the scope of the paper.
Based on Porter (1998), ideas and understanding of how to understand your competitors, I can use the following model.

**Figure 5 the Components of a Competitor Analysis (Porter, 1998 P. 49)**

According to Porter, (1998) a competitor analysis consists of four components; future goals, current strategy, assumption, and capabilities.¹

It is clear that a deep understanding of these four components will give EM a powerful new tool when dealing with market competition. However, the focus

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¹ Although we usually treat future goals as part of strategy, it will be analytically useful to separate goals and current strategy in competitor analysis (Porter, 1998)
of this paper is to understand the movements of the competitors in the market. Later on in the paper, after an introduction to the market, you will find a “headline” introduction. In this part, I have built the framework for the thesis work. The foundation is a model from Porter (1998), and then I have tried and used different ideas, especially from authors within the area of CI, to build up a framework that will take me closer to my goal.

Some parts of the framework include McCarthy’s 4Ps model, and others include things that I together with the management of EM have considered as important to the work.

At the end of the paper, I will make some reflections on the model used and recommend changes that might be needed to develop the framework even further.

3.3 Introduction to microsilica

Microsilica (MS) or, as it often called, silica fume is a second-hand product in the production of silicon metal (Si-met) and ferrosilicon (FeSi). The production process of Si-met and FeSi is very polluting, and microsilica was discovered during the process of how to avoid pollution.

Elkem Microsilica® is an amorphous silicon dioxide produced during the manufacturing of ferrosilicon alloys and silicon metals. The silicon dioxide contents in Elkem Microsilica® are 85-95%

The average particle size of the glassy microsilica spheres is about 0.15 micron. A consequence of the small particle size is that Elkem Microsilica® has a very large specific surface area, about 100 times that of cement.

The silicon dioxide in microsilica is in an amorphous (non-crystalline) state. Therefore, microsilica is not hazardous to the health of the people working with it.
The picture below may give you a clearer understanding of the process.

The process in itself is very simple, but the equipment is expensive.

Figure 6 Production of MS (silica fume)

Here, we see the production of Si (silicon); the process regarding the production of Si or FeSi is the same, the only difference being the raw material used.
4 THE MARKET

4.1 Silicon and Ferrosilicon

Silicon and ferrosilicon, commonly referred to as ferro-alloys, are increasingly being consumed in very different end-use application: Silicon is used primarily in the manufacture of aluminium alloys and in chemicals such as silicones, while ferrosilicon is consumed in steels and cast iron.

The consumption of silicon metal has expanded at 2,6% pa, increasing from 800.000mt in 1995 to 910.000mt in 2000. Aluminium alloys are the principal application of silicon metal, accounting for approximately 430.000-440.000mt in 2000. The growth in the consumption of silicon in this industry has been modest, however, averaging around 0,6% pa. The chemicals sector accounts for an estimated 44% of the total demand and has expanded at a more rapid annual rate of 6%. Although only accounting for a small proportion of total demand, the semiconductor industry has shown significant growth with silicon metal consumption increasing at an annual rate of 8%.

According to estimates, the world consumption of ferrosilicon is equivalent to 1.81 million ton of contained silicon. Of this total, 950.000mt are accounted for by the iron industry and a further 850.000mt are used in the manufacture of steels. The dependence on these two metallurgical applications means that the demand for ferrosilicon will continue to track the cyclical growth patterns of the iron and steel industries. Future increase in the demand for ferrosilicon will therefore most likely be linked to economic growth, and is not expected to exceed 1,5-2% per year for the next decade (The economics of Silicon & Ferrosilicon, 2000).

Some highlights from the market (The economics of Silicon & Ferrosilicon, 2000):
- World production of silicon metal totalled 974.000mt in 1999. Brazil, China, Norway and the USA account for 75% of total output.
- Ferrosilicon output was in the region of 4.2 million ton in 1999. China is the dominant producer accounting for over 36% of the total.
- China has become the world’s largest producer of both silicon and ferrosilicon. China is reported to have over 100 domestic silicon metal procures, and silicon metal output has increased rapidly in recent years. There are more then 70-ferrosilicon producers in China, with a reported capacity of more than 1.8 million tons.
- Many Western producers are moving away from ferrosilicon production in favour of more profitable silicon metal operations. The conversion from ferrosilicon to silicon metal production is in response to market pressures:
higher production costs, decreased ferrosilicon production due to competition from imported material, and the lifting of anti-dumping duties. Japan no longer has a domestic silicon or ferrosilicon industry, and demand is met by imports. Japan is the world’s largest importer of ferrosilicon, accounting for 440,000mt in 1999.

4.2 Microsilica

Many factors will affect the production of the MS in the future. Take the Chinese industry, when environmental laws are imposed in China to limit the pollution from the metal industry, I assume that many plants will invest in microsilica filters on the smokestacks.

The theoretical capacity of MS and filtered MS is estimated to:

<table>
<thead>
<tr>
<th>Year</th>
<th>Theoretical Capacity</th>
<th>Filtered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1,150</td>
<td>664</td>
</tr>
<tr>
<td>2001</td>
<td>1,066</td>
<td>690</td>
</tr>
<tr>
<td>2004</td>
<td>1,160</td>
<td>810</td>
</tr>
<tr>
<td>2006</td>
<td>1,167</td>
<td>872</td>
</tr>
</tbody>
</table>

Table 1 World-wide MS production 2000-2006 in mt. (Elkem Materials Global Sourcing Manganese Oxide & Microsilica 2002-2006)

There is a worldwide reduction in the production of silica fume. Out of a yearly saleable quality estimated at 470,000mt in 2001, about 75,000mt will disappear from the market. The reason for this is a global reduction in the demand for ferrosilicon and silicon metal.

However, due to international legislation on the ban of asbestos, there will be an increased demand for silica fume, especially in high performance concrete (HPC) and fibre cement (Elkem Microsilica® – a shift in Supply and Demand, September 2001)

5 COMPETITOR ANALYSIS

5.1 Identify competitors

When conducting the competitor analysis, we will focus on four main areas within Elkem Materials, viz.: Concrete, Fibre Cement, Refractory and Well Drilling Production (WDP). The competitors have been identified by Elkem Materials and are not a subject for discussion in this paper.

5.2 Introduction to different parts of the model

5.2.1 Current Strategy

This part is based on McCarthy’s 4Ps model.

- Price:
Product:
- Business area: Shows the application areas of MS.
- Production range: Shows the basic products used in the production of metal.
Place:
Promotion:

5.2.2 Capabilities
Quality: Microsilica with a commercial quality\(^2\) will be between 0.4-0.5\% of Si metal. When Microsilica is based on FeSi a commercial quality will be between 0.15-0.25\% of FeSi. The best MS is obtained from Si-met, and not from FeSi.

- Production: The region in which production takes place.
- Ability to Grow: What capabilities does the competitor have for potential growth.
- Research and Engineering: How much emphasis does the competitor put on R&D.

5.2.3 Assumptions
Assumptions fall into two major categories (Porter, 1998):
- The competitor’s assumptions about himself
- The competitor’s assumptions about the industry and the other companies in it

The company’s assumptions about its own situation will guide its behaviour and the way it reacts to events. An examination of the different kinds of assumptions can identify biases or blind spots that may creep into the way managers perceive their environment.

Identifying these blind spots will help EM decide on moves with a lower probability of immediate retaliation and on moves where retaliation, once it comes, will not be efficient.

5.2.4 Future Goals
A knowledge of the competitor’s goals will allow predictions about whether or not it is satisfied with its present position and financial result, and thereby, how likely that competitor is to change strategy and the strength with which it will react to outside events or moves by other firms.

The diagnosis of goals should be done at all levels of the company, from corporate goals until goals for the individual functional key area manager.

\(^2\) This is calculated on the background of the amount of metal that is being used in the production of metal.
I am not looking for the goals presented on the “homepage” or for the official strategic goals of the individual company, which are essentially the same for all the companies. I want to get a bit deeper into the strategic vision or goals for the individual company, to find out what it is actually means and wants.

- Organisational structure: The organisational structure tells us how responsibility for key decisions, such as resource allocation, pricing, and product changes, has been allocated. The organisational structure also provides some indicators about the relative status of the various functional areas and the co-ordination and emphasis that are deemed strategically important. Where responsibility for decisions has been assigned will give clues about the perspective top management wants to bring to bear on them.

- Attitude towards risk:

- Financial information:

5.2.5 Other Information
This chapter will include information which I have not able to place under any of the headlines in the thesis, but which I still consider great importance and which I want to include in the report.

5.2.6 SWOT
This part may include information that has not been included in any other part of the work.

5.2.7 Analysis

“The great end of life is not knowledge, but action”
- Thomas Henry Huxley

The analysis is based on the preceding chapters and on my personal and general understanding of the situation of the different competitors. The reason for me to base part of the analysis on my own understanding is that I have been reading and talking with a lot of people, and there has been a lot of information that has not been included in the paper. There is therefore a possibility that it may be difficult to directly relate some of the information provided in the analysis to the information given above.

I think there are about 10 questions that the part containing the analysis should try to answer. I will not be able to answer them all, but a follow-up or the continues work of the CI will in the end give an answer to all of the questions. One of the reasons why a company takes the step towards a CI system is that they want to win more then just their “fair share” of the business available. So,
if we are able to answer most of the following questions, I think it will be one big step in the right direction.

1. Why does the competitor even exist? Does he exist simply because EM does not have enough capacity to serve the whole market, or does he contribute something to the market that EM cannot furnish in quite the same way?

   We can try to answer this question with the three following questions:
   • Do competitors exist in order to make money, or are they a strategic part of a larger organisation?
   • Are they expected to be profit centers, opportunity seekers, or service organisations within a wider business?
   • Do EM competitors exist simply to provide a stable income for the owners, or are they aggressive, ambitious competitors?

   If we manage to answer these questions, they will be most useful in the development of a strategy for EM.

2. Where do they add “Will-Pay-For” value for customers (T. Kedrick & J. Blackmore, 2001)? Assuming we now understand why we are not alone in the market, we can ask ourselves, why do customers choose our competitors and not us?
   • Is it because of their quality?
   • Price?
   • Overall perception of value for money?
   • The way they do business?
   • Simply a matter of excellent credit terms?
   • Or invoicing procedures?
   • Do they take on board some of daily routines or tasks for customers?
   • Do they have contacts that make them more useful?
   • Are the competitors just nicer people to deal with?

   If EM in effect wants to compete in the marketplace, they will need to understand what, in the eyes of customers, differentiates “them” from “us”.

3. Which ones of EM’s customers will the competitors be most interested in? The competitors will almost certainly only be interested in some of EM customers. Do the competitors really want the demanding; long credit taking, obnoxious time-wasters who believe it is “our” duty to serve them? I do not think so, I think they want to cherry-pick the customers who can potentially generate the biggest margins. I think it is important for EM to formulate its competitive strategy around this question. EM has to look at its own customer base.
   • Who are the customers that EM should fight tooth and nail to defend?
Graduate Business School, The School of Economic and Commercial Law

- Which ones should EM make an exceptional offer to maintain?
- Which ones should EM allow to go if they are not able to come to a mutually rewarding arrangement?

What if EM one day realises that their customer base is simply composed of the customers that the competitors did not want? A key element of the business strategy should be to retain the best and most profitable customers

4. The Cost Base and Liquidity of EM’s competitors, what is it? How do EM’s competitors make money and profits? In the same way as EM? If not, we will have to find out how they do.
- Do they make their profits because they have invested in better products and services, or do they make it because they have managed to get excellent financial deals with their suppliers?
- How much cash do they have?
- Will they be able to react if you disturb the marketplace?

As EM is not a low cost supplier, how can it make sure that it will keep added value in the marketplace, and how can it avoid commoditisation and, as a consequence, the drift away from EM’s products and services?

Being a low cost supplier can be an important source of sustainable competitive advantage (T. Kedrick & J. Blackmore, 2001).

5. Are the competitors less exposed vis-à-vis their suppliers than EM? Some theories now suggest that competition is really about your supply chain versus their supply chain (T. Kedrick & J. Blackmore, 2001). If your suppliers are less reliable than theirs, then you are significantly more exposed to potential disaster than they are.

If a competitor has a more reliable and cost-efficient supply chain than you do, they are likely to outperform you in the long-term race for the customer’s mind and money

T. Kedrick & J. Blackmore, 2001

6. What do they intend to do in the future? This is, of course, the hardest one; there are no facts about the future. Nevertheless, the future strategies of our competitors are of most interest to us. CI is very much based on sound judgement about the future, rather than significant volumes of seemingly precise historical data about past activities of each competitor. We have to
make sure that we constantly think about their strategy for the future as well as simply looking at their current and past operations.

7. How will competitor activity affect EM’s strategy?

8. To win customers, how much better than them does EM need to be? Competitive advantage is not simply about making a better offer to the marketplace; it is about making an offer that is perceived to be significantly superior to the marketplace. It will be interesting to find out how loyal EM’s customers are.

9. Will new competitors or new ways of doing things appear over the next few years? It is dangerous to focus solely on the existing in your marketplace.
   - Who may be looking hard at EM marketplace with a view to potentially entering it in the next few years?
   - Is the MS sector generating enough profits to attract new entrants, or is legal legislation related to pollution going to open up a new market for many metal-producers?

New entrants are likely to enter with new ways of doing things, and that might be difficult to deal with.
   - Is MS reaching the end of its lifecycle? Are there any real substitutes products?
   - Are new ways of meeting the needs of the customers about to appear in the coming year?

10. If you were a potential MS customer, would you choose Elkem Materials as your supplier, or would you choose one of its competitors? At the end of the day, the acid test of your offer is how well are you convinced that it would be your own choice as well? Can you honestly put your hand on your beard and say that, given the range of alternatives, that you would choose EM products and services?

Think of all the things that annoy us as customers and then consider how often you do these things to your own customers? Are there other things that irritate your customers of which you have been completely unaware? Are there competitors out there that do not do these things?

Find out what delights the customers, and ask if you do these things more consistently and better then your competitors.

As said earlier, I will not be able to give an answer to all of these questions, but still they will form the basis for future work.
6 REFLECTION AND EVALUATION

“I don’t want to know what the other guy did to me yesterday; I want to know what he is going to do to me tomorrow”

During the first part of the Master course, our main study tool was the Problem Based Learning (PBL) (GBS, 2001). We were working in basic groups, and these groups had some important roles including:

1. The group should discuss the problem area and agree upon a problem, learning goal.
2. The group could be used for helping in pursuing individual activities, for example search of information.
3. The group should be used for dialogues concerning the problem studied.
4. The group will report their learning by a group report for which all members in the group are jointly responsible.

For a firmer introduction to the PBL, please visit http://www.handels.gu.se/GBS/im.html.

The year, where PBL was my main tool for learning, was my best year as a student, and it would be wrong of me not to take it with me out of the academic setting and into the “business world”. The first step in this process was to use the PBL model in my thesis work, but this time not with my fellow students, but with a company. So how did we do this?

The first step was then, of course, to form the PBL group; I fast became a “member of the management team”, and this group became my PBL group. In this group, we agreed on the basic research questions, development of the model, problems along the “road” and how the results should be handled in the final report. The only difference between this PBL and the academic PBL group is that it is not an academic setting and that I carry the final responsibility for the report and not the PBL group. The Business Director represented the facilitator.

In working with the dynamics of a PBL group, the importance of self-evaluation, reflection and feedback between members is emphasised (Holen, 2000). This was achieved through daily-unscheduled meetings, initiated by all group members.
7 DEVELOPING OF THE MODEL

As a student ready to show what I am capable of, I entered the second meeting with the Business Director with a finished framework based on Porter’s components for a competitor’s analysis (Porter, 1998). Did I manage to impress him? He told me that it was good of me to use Porter, but the model did not really represent his understanding of the problem. It was clear that the model could be used, but not in its original format as it was too broad.

As we know a model represents a simplified and often very generalised reality. The thesis work represents reality, not a simplified reality, and EM’s management wants to get as near to reality as possible.

Back to the university to do some more research, how to customise the model to the microsilica industry? During our second meeting, the Business Director told me that he was fond of the 4P’s model. I introduced the McCarthy’s 4Ps model to the framework, and did some deeper research into the area of CI. My problem was that there was no clear ready-made model, and I was not able to come across a ready-made model for Competitive Intelligence. Kahaner (1996) gave me some good ideas, and on our third meeting, I was ready to present a reviewed model. Was he impressed?

Critical feedback is the lifeblood of healthy science (Shermer, 2001), and it was time for me to get some feedback. I had reached a limit within my personal understanding of the industry that I was working with. Together with the Business Director, I sat down and did the final adjustments to the model.

When the Business Director was satisfied with the model, and I felt that, I was confident that it fulfilled the academic requirements, and then it was introduced rest of the PBL group. They gave the impression of being very pleased with the work.

The next step was to get find information.

8 COLLECTING INFORMATION

The collection of information is a vital part of CI. During my work, I divided the information into several levels.

- Background information: What is this company all about?
- History: How has the company behaved in the past?
- Up-to-date information: How is the situation of the company at this moment?
- What to expect: Can we see a trend?
CI is mainly about sound judgement; there are no facts about the future, besides the fact that we do not know the future.

We are now going to take each stage in the model, present an example and see how we get the information. It is here important to realise that the MS market is not a very transparent market.

When I talk about inside information, I am referring to information that is not publicly available. Inside information also includes other types of publications that are not available to the public, for instance ratings from Dun & Bradstreet.

The main part of the public information that covers the area I have been working with comes from:
- American Metal Market
- Annual reports
- Business and Company Resource Center
- Companies press releases
- Internet
- Metal Bulletin
- Ryan’s notes

In addition, business databases at my University were very good sources of information that is also available to the public.

8.1 Current Strategy

Company A does not have any person devoted to MS; Mr. B sells all of the products. However, initially he started by selling MS only, but later on, he moved to handle all of the products.

A is actively trying to sell their MS outside country C.

8.1.1 How I did it

This part is mainly based on inside information, however, in some cases I was able to get a bit from information available to the public. However, as most of the companies do not have a separate division for MS production, you will not be able to find out from public records how many of the employees are devoted to ms..

8.1.2 Price

Very aggressive on price, in country D selling through company E, $230 for small bags, and in country F $235 also small bags.

In 2000, they tried to enter the F market, with a price indication of 270-280USD/MT.
In country, D the price for the G project is estimated to 270-280USD/MT, CIF G.

When selling to company H the price is estimated to be somewhere between 30-50USD/MT

8.1.2.1 How I did it
In a few cases I have been able to get a hold of price offers from competing companies, but as prices usually change all the time and they are also dependant on the amount and quality of the product, it is difficult to give an good estimation of the competitor’s prices. However, I was able to get a feeling of their price strategy when using EM’s prices as a standards point of departure. Interviews with people that are very close to the market were also a good source of information.

8.1.3 Product
- Business area: Concrete, Fibre Cement
- Product range: Si-met, Si
- Substitute product:

8.1.3.1 How I did it
This is also partly based on inside information and public information. The product range is public information, because this is usually part of the company’s core business. In this case, Concrete and Fibre Cement are the areas where MS is being used, and it is? Part of the business that is not receiving any attention. As I was not able to obtain any specific information from public sources, it became vital to obtain inside information.

8.1.4 Place
- Production area: NAME
- Sales area: NAME

8.1.4.1 How I did it
Very much the same as in the preceding chapter. Inside information was again very important, in some few cases I did, however, get a hold of some advertisements from competing companies which give information about the type of projects that they are taking part in.

8.1.5 Promotion
Of A’s total production of MS, about 11-14000mt are handled by I and H in C. In D, the product is promoted through E.
A is also active in B. Get help from an independent trader, former regional manager for EM.

**8.1.5.1 How I did it**

Part of the information is often available in annual reports and the company’s homepage. However, these only give you the official version. Regarding the unofficial promotional network, we once more obtained the information from insiders. Another good source of information was EM’s own distribution network, and independent distributors and traders were able to give me a lot of help here.

**8.1.6 Evaluation**

*Price is their main tool when selling MS and their price policy is very aggressive. Their main customer is C, who blends the MS with cement and consequently the price is very low. They want to sell their product outside B and in this way reduce their dependency on C, and they are also trying to get a higher price for their product.*

Their focus is J, however, they have been into D, probably working on D and are active in B. It is interesting that in B they are using a trader who previously worked for EM.

**8.1.6.1 How I did it**

To identify the strategy currently used by a firm is not that easy. The nature of this market is one of the reasons why it is so hard to identify; I really feel that there is a lack of consistent behaviour. So I used the information I had available and made some logical assumptions based on my understanding.
8.2 Capabilities

8.2.1 Production

*Company A has today the following production within the Ferroalloys area.*

<table>
<thead>
<tr>
<th>Production Plant</th>
<th>Production cap. Si/FeSi in mt</th>
<th>Actually production Si/FeSi in mt</th>
<th>Actually production MS in mt</th>
<th>Production cap. MS in mt</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>/25.000</td>
<td>/65.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>C</td>
<td>/50.000 (40.000)</td>
<td>/65.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>D</td>
<td>(30.000) 40.000/</td>
<td>30.000/</td>
<td>15.000</td>
<td>20.000 (17.000)</td>
</tr>
<tr>
<td>E</td>
<td>(20.000)/80.000 (75.000)</td>
<td>-</td>
<td>18.000</td>
<td>18.000 (20.000)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>40.000 (50.000)/155.000 (115.000)</td>
<td>30.000/65.000</td>
<td>33.000</td>
<td>38.000 (37.000)</td>
</tr>
</tbody>
</table>

Table 2 Production capacity Si, FeSi, MS Actually production Si, FeSi, MS in mt (Homepage, 2001. advertisement from company A, 1996. Visiting report)

All the factories are ISO-9000/9002 approved, and recently an environment control certificate, according to the ruling ISO-14001, has been obtained.

The production table does not include the F and G plants, as they do not produce Si/FeSi. However, according to Metal Bulletin – September 24, 2001, the company is about to invest 1.97bn to expand the production of ferro-manganese and ferro-silicon at its H plant in I. This will increase the production with 25.000tpy, however, 30% of the total investment will be spent on an environmental protection program. Today, the plant produces about 140.000tpy of ferro-manganese, silico-manganese and ferro-silicon. It is possible to produce MS at the J plant as long as the smoke from the FeMn is not mixed with the FeSi smoke.

I think we next year might also expect an X volume from K and L, as they are going to start cleaning the smoke from the furnaces. I do not know the exact volume that will be produced.
I assume that the investment in environmental protection will include filters for MS production, due to new regulation from EU.

<table>
<thead>
<tr>
<th>Segment \ area</th>
<th>ASEA</th>
<th>AMEA</th>
<th>EURO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td>1000</td>
<td>3000</td>
<td>3000</td>
<td>7000</td>
</tr>
<tr>
<td>Fibre</td>
<td>-</td>
<td>-</td>
<td>3000</td>
<td>3000</td>
</tr>
<tr>
<td>Refractory</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>WDP</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>3000</td>
<td>6000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Table 3 Sale divided between areas for 2003

The figures presented in the table do not include the latest investments in production equipment at the M plant.

We are able to look more closely into the details related to N production of MS.

|-------|------|------|------|------|------|------|------|------|

Table 4 Production of MS in mt, (homepage, 2001)

According to themselves, they produce about 15,000mt MS/yr at the O plant.

A is also holds 80% of the shares in P, a company with a very modern ferroalloys factory in Q. Today, this company is considered one of the world’s biggest producers of ferroalloys and has managed to reach a very favourable position in both R and S markets. (Homepage, 2001)

At the P plant, quality analyses were made on the following dates with the given result:

<table>
<thead>
<tr>
<th>Sample Analyst date</th>
<th>SiO3 %</th>
<th>Fe2O3 %</th>
<th>H2O %</th>
<th>C %</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/07/2001</td>
<td>95,31</td>
<td>0,49</td>
<td>0,37</td>
<td>1,3</td>
</tr>
<tr>
<td>30/07/2001</td>
<td>95,39</td>
<td>0,43</td>
<td>0,001</td>
<td>1,31</td>
</tr>
<tr>
<td>04/08/2001</td>
<td>95,87</td>
<td>0,36</td>
<td>0,31</td>
<td>1,25</td>
</tr>
<tr>
<td>04/08/2001</td>
<td>95,90</td>
<td>0,36</td>
<td>0,31</td>
<td>1,31</td>
</tr>
<tr>
<td>04/08/2001</td>
<td>95,73</td>
<td>0,42</td>
<td>0,29</td>
<td>1,28</td>
</tr>
</tbody>
</table>

Table 5 General information about quality

The figures indicate the quality of the MS on a general level, and it is probably because the work is driven by the experience of T. However, it is said that they have problems with coarse particles, which are probably bigger than 45my.

8.2.1.1 How I did it

In a few cases, I found the information on the competitors’ homepages and in their annual reports, but the main source of information was historical data
available at EM and, of course, the knowledge that people working in the field have. Distributors and traders were also an important source of information.

8.2.2 Ability to Grow

The company is both forward- and backward- integrated. Forward, A (80.8% of the shares) and B (67% of the shares). Both companies are dedicated to the marketing and selling of structural elements of reinforced and pretensed concrete for civil works and for buildings. Backward, C (100% of the shares) and D (99.3% of the shares). The first one exploits quartz mines since quartz is the raw material in the making of ferroalloys. E is dedicated to production of ferroalloys and electric power.

In 1999, the company had 623 employees.

In Metal Bulletin – June 21, 2001 - Mr. F confirmed that a 30,000 tpy high quality ferrosilicon plant would be build at G. The cost for this plant will be around €20million, and this amount includes the planning and engineering work.

At the H there is an investment in a new furnace

With the latest investments in the J plant, I assume that A is cabal of growing.

They also have emphasis on R&D with special focus on MS.

8.2.2.1 How I did it

Mainly public sources including annual reports.

8.2.3 Research and Engineering

The A R&D department has close collaboration with the university of Santiago (Galicia) and other public departments of research, mainly in Galicia, and takes part in nearly all-existing research programmes both on national and European level. A keeps good contact with various European universities as well as with consultants in several other countries.

Among the main projects in progress are, apart from B, the automation of all plants, the application of microsilica, and new systems for ferroalloys casting.

8.2.3.1 How I did it

Public sources, including annual reports and, especially, databases available to me at the University. However, there is still very little information available on the MS business, most information is on the metal business. In spite of this, I used research from the metal business as an indication of possible research or, at least, as an indication of a potential for research in the MS business.
8.3 Assumptions

A assumes that the domestic volumes are stable, and that there will be an increase in export shipments.

A thinks there will be a positive development in the concrete business in Scandinavia.

8.3.1.1 How I did it

This was a very difficult part. I got some information from public sources, but it was information that was widely known to the market. The only way to get this type of information is to get it from a competing company, and for this you need connections, which I did not have. I did, however, conduct interviews with competing companies and that gave me some ideas about their assumptions.

8.4 Future Goals

8.4.1 Organisational Structure

A is a subsidiary of B, where B controls 84% of the stock in the company. 16% of the stock is held by the officers.

8.4.1.1 How I did it

Annual reports and public information, of course. Amadeus, a database at the university, is also useful when dealing with companies in Europe.

8.4.2 Attitude towards risk

“To initiate change, you have to be tenacious and not afraid of getting a little dirt under your fingernails”

The President of A, Mr. C., is a person that earns a lot of respect. If it were not for him, A would not be what it is today or even a few years ago. When he was hired in March 1984, the company was on the way out of the market, he turned it around; he worked for eight years to transform an old-fashioned company into a modern company. (Harvard Business Review, May/Jun 92)

I think A is a company that is willing to take a lot of calculated risk; they have a President who “lives” for his job.

8.4.2.1 How I did it

A historical perspective is very important, to see how they have been behaving in the market and if they are willing to take risks. To learn about the management team can be a good contribution. I learned about the different managers by reading CV’s, by looking up articles about them and by talking with people about them.
8.4.3 Financial information

There is very little financial information available on the company. A had a sister subsidiary D that went bankrupt on April 4th 1995.

8.4.3.1 How I did it

For public companies, the annual reports will furnish a lot of information, however, in cases where you are dealing with companies that are not public, you have to rely on public information and press releases from the company itself.

8.4.4 Summary of future goals

<table>
<thead>
<tr>
<th>Type of Goals</th>
<th>Financial</th>
<th>Strategic</th>
<th>Organisational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial level</td>
<td>NA</td>
<td>No strategic focus on MS. Focus on high quality silicon metal for aluminium, chemical and electronics industries and especially alloys for iron foundries.</td>
<td>NA</td>
</tr>
<tr>
<td>Corporate</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Top Management</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Middle Management</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Table 6 The Levels and Types of Goals (Adapted from J. A. Czepiel, 1992. P. 358)

- Signs indicate that A in 2001 – due to 1) reduced production capacity and 2) the growing US concrete market – will withdraw from the export market and from Japan in particular.

8.4.4.1 How I did it

This gives a summary of my understanding based on the information obtained from reading documents and on information received during conversations with external and internal people.

8.5 Other Information

8.5.1.1 How I did it

Information included in this part can be from all types of sources. It will be gathered under “other Information” if I think it is relevant, when I am not able to place it within the given framework of our model.
### 8.6 SWOT

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>D will close down this winter.</td>
</tr>
<tr>
<td>Central European presence</td>
<td>Limited resources on the microsilica business</td>
</tr>
<tr>
<td>Tied up with B</td>
<td>E, situated 1000km from Durban port.</td>
</tr>
<tr>
<td>Good relationship with C</td>
<td></td>
</tr>
<tr>
<td>Large storage capacity in Europe (Silos)</td>
<td></td>
</tr>
<tr>
<td>D will close down this winter.</td>
<td></td>
</tr>
<tr>
<td>Limited resources on the microsilica business</td>
<td></td>
</tr>
<tr>
<td>E, situated 1000km from Durban port.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>New metal acquisitions via E may increase their MS position (F)?</td>
<td>G</td>
</tr>
<tr>
<td>Co-operation with G</td>
<td>Limited organisation working with MS</td>
</tr>
<tr>
<td>Technical support from G in H</td>
<td>Hydroelectric power cost</td>
</tr>
</tbody>
</table>

Table 7 SWOT of A

#### 8.6.1.1 How I did it

To make a SWOT requires a great understanding of the market, something I have not been able to obtain. Therefore, I have sorted the information I have obtained and tried to place it according to the SWOT requirements, without commenting on them.

#### 8.7 Analysis

A has a very strange behaviour in the market regarding its MS and Si production. B was closed 50% of the year 2001 due to energy cost; C that was bought in 1997 has been closed down due to energy costs, both of which produce MS.

The D and C plants have been up for sale, however, without any success. C was not sold mainly because of price disagreements, according to inside information. Both of the also produced MS.

Company E based on company A made a forecast saying that silicon prices will improve later on this year and this may be a reason to keep it, as we today know the demand for silicon is very low.

Usually when the demand for Si is low the demand for FeSi will also be very low. However, A, because it failed to sell C, will convert the plant to a FeSi-. As another competitor of A commented:
“I still haven’t figured out what A is planning to do”

The only explanation for this, as I can see it, is that A does not see a future in Si. It should be added that MS from FeSi has a lower quality than MS from Si production.

We have also seen that A’s financial situation is not too good; the selling of the plants might be a way to improve liquidity.

A is also pulling out of different geographical areas.

Another interesting aspect of A’s operation related to the MS is their interest in selling themselves out of plant F. As we know, F stands for 100% of the MS in region G.

MS is not a part of their core business, and it is not a part of their strategic focus.

It is very difficult to see where this company is going, but one thing for sure, they are not going for the MS business.

Maybe A is actually up for sale? Maybe B is interested in getting out of A.

I would not in any way consider them as a threat, maybe rather as an opportunity for H!

8.7.1.1 How I did it

The key thrust of CI is to analyse, to turn raw data into actionable intelligence. So after having collected a lot of data, talked with a lot of people, outside and inside the company, it is time to ripe the benefits.

My goal was then to logically describe the possible future actions of the different companies.

The response from my PBL (management team) group was good. Of course, they did not agree with me on all future aspects, but it resulted in fruitful discussions and that was good.
9 THE USE AND BENEFITS OF MY WORK

9.1 Today

“I am impressed taking into consideration the short time you had to make this paper, however, it has its limitations”

Business Director, EM

I think it is clear that this type of work will have limitations when done by a master student. There are as I can see several reasons to this. Firstly, the time I have been working in the MS business has been limited to two months, and I do not think you can fully understand such a complex industry in two months. Secondly, the total lack of real life working experience on my part. But, in spite of the limitations, the thesis is not useless.

The thesis will allow the management team at EM to get a different perspective of their competitors; it also gives them a nice compendium with structured information about their present main competitors.

From January 1st, a new trainee will start working for EM. The CI work that I have been doing will be an introduction to the MS market and EM’ competitors. The thesis work will also serve as a first step in the ongoing CI work. Where the model that has been developed will be a tool to structure information.

From January 1st, EM will also have a new Business Director, and once more my work can be used to introduce EM’s business to him.

9.2 In the future

Unlike internal knowledge management, CI’s focus is on external events and trends, with a strong focus on the competitors’ activities and possible intentions (Miller). A key goal is “early warning”; timely alerts that allow decision makers to take preparatory action to maintain competitive advantage. To be succinct, competitive intelligence allows management to detect changes in the market early and quickly enough to make a difference for the strategic position of the company.

Competitive Intelligence operations can pay off. A 1995 study by academics at the University of North Texas found that businesses that emphasized CI generally outperformed those that did not in three areas:

- Sales
- Market share
- Earnings per share
The study suggests that “there is a positive relationship between emphasis on CI and successful financial performance”.

Another important aspect of a well-developed CI system is the amount of information that will be stored in it. This will help EM to be less vulnerable if some of its key personnel quit, besides many other advantages of having all of this information available.

10 REFLECTIONS

10.1 The working process
The process of gathering information, structuring and analysing it has been very interesting. I very soon became part of the staff at EM’s headquarters in Kristiansand. However, my work would probably have been a bit smoother if the different managers around the world had been informed about it. The Business Director immediately assumed the responsibility for this criticism, but in spite of that, I do not think any specific action was taken before very late in the process.

Continues communication with the different regional managers resulted in a relationship of trust, which allowed me to gain unique insight into the company.

10.2 The model
When developing and working on the model I was thinking about continuity, not realising the difficulty that I would have in obtaining the information that I wanted within the limited time available.

I recommend Elkem Material to continue to work on the model presented in this paper. It is a good model when used on a continues basis. However, when it is being used within a limited timeframe, as I have, you will not be able to obtain all of the information needed, and this will affect the result. I was probably a bit too ambitious.

Towards the end of my thesis work, I had the pleasure of working with some other products in the same industry, also at EM. I was asked to do the same type of work as in my thesis, but with other products. During this work I realised, that even if the model has been customised for a special industry, it is not necessarily applicable to other products without a new customisation. This made me realise why I have not been able to find any good CI software; because the software has to be customised in each instance to a given level within the individual industry, and that might not be financially feasible today.
I do not think that the companies will be willing to pay the price that it will cost to customise computer software.

**10.3 The Sources**

I have during my work realised that to really be able to do a good job within Competitive Intelligence, it is not enough to sit down, read secondary information, and conduct some interviews with people outside and inside the company. You really need to get “under the skin” of the competitors, of course, within what is considered to be legally and ethnically correct.

Interviews with no tapes allowed were conducted with general managers at competing companies. When the information had been analysed it turned out to be so controversial that it raised the question of what you could allow yourself to write, and what should remain only conversations behind closed doors. This reflects the importance of the human contribution within CI.

Interviews conducted with EM personnel also gave much more information than you would ever be able to obtain by just reading documents.

**11 FINAL COMMENTS**

Time is needed to really understand the strategy of a competitor; you need to be able to see the patterns of strategic development. Strategies usually do not occur as major changes, but more gradually over time. During the preparation of this thesis, there have not been any major changes in the market, and that has made it even more difficult to understand the moves of the different competitors. However, by monitoring the moves made by them, clearer patterns will emerge, and you will be able to get a clearer picture of their strategies.

I think it is very important to try to identify the flux stage in a company’s strategic development. If you manage, you can expect something more to happen as there will probably be a strategic change in the company.

**12 FURTHER STUDIES**

**12.1 Counterintelligence**

Irrespective of whether your competitor uses legal or illegal means of CI or any other approaches, the simple fact remains that the best way to protect yourself is to employ a counterintelligence process. (J. A. Nolan III, Nov/Dec 1999)

For more and more businesses, a counterintelligence approach makes a great deal of sense because leaders are becoming more attuned to and greater consumers of intelligence products. Indeed, when we discover how much
accurate information we were able to obtain legally, ethically and quickly we might begin to wonder just how vulnerable a company like Elkem Materials is?

Elkem Materials should then ask itself two questions:
1. Why are our competitors making money at our expense?
2. What is there about us that allow us to make money at their expense?

The first question drives the intelligence collection cycle, the second drives the counterintelligence and protection cycle.

It would therefore, be interesting for Elkem Materials to undertake an in-depth study of its counterintelligence system.

The aim of the study would be to increase corporate security.

12.2 Understanding the ms market

I have now been working with microsilica for about 3 months, but I have still not been able to really detect a clear and rational or logical strategy from any of the competing companies, and I wonder why is this is the case.

It is clear to me that the ms market is not like any other market. It does not behave rationally or logically. Companies are coming and companies are leaving the market. To take an example, if you produce metal in Norway and get ms, you will then automatically get -1.100NOK/mt. Consequently, as soon as you are able to recover the costs related to logistics you will have made a better margin. In other countries like China or South Africa, you do not have this cost, cover your logistic cost and you have made a profit, much easier then the countries with dumping cost.

Also when referring to emerging markets, we might be talking about the metal market, and in countries without tight environmental control it is up to the company itself to install or not install filtration equipment. A company may decide to start production and then suddenly stop, and the reasons can just be too many. I other words a company might come and leave, with out us really understanding why.

I tried to identify the market as a harvesting market, but the companies do not “produce” ms, it is a bi-product. The quality of the ms goes up and down, and so do service and support.

The companies are sometimes willing to sell and sometimes not, how should a company like EM, who is a market leader, react and work with this market? Is

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3 The cost of dumping the material
there any good model that represents the market? I have not been able to find one.

There is a very high turnover in EM’s management and, in conversations with subordinate personnel that has been at EM for very long time, they point out that it is very difficult to understand the ms market. New managers too often underestimate the complexity of the market, or they come from an industry with a rational approach to the market.

I think it could be very interesting and very useful for the EM to get a study strictly on the market. Is it possible to identify clear strategies from a market point of view? My study has been to identify strategies from competitors’ point of view. I think it would be a very good contribution to the industry to make a study from a market point of view, and on how a market leader should behave. How should you deal with a market where the majority of the players just do not care at all?
13 LITERATURE AND SOURCES

13.1 Recommended readings


Miller, Jerry P. Et al. (2000) *Millennium Intelligence: Understanding and Conducting Competitive Intelligence in the Digital Age*. CyberAge Books


13.2 Sources

http://www.schip.org/ (Society of Competitive Intelligence, 2001)


