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#### Abstract

In today's strongly competitive free market economies, in order to succeed, it has become extremely important for a company to know its competitors. An increasingly popular company practice that steps in here, by helping monitor the competitive environment of a company, is Competitive Intelligence (CI). CI seems to be especially popular in the USA and in big Asian and European economies such as China, Japan, France and Germany. While country-specific CI studies investigating the CI practices in the aforementioned countries are currently rather extensively available, hardly any literature regarding such activities in less CI-sophisticated countries exists.

This diploma thesis attempts to address this gap in the existing literature by studying the CI practices within the companies of a small European country, namely Austria. This is done by (a) developing a definition of CI based on a comprehensive literature review and (b) conducting an explorative research on CI, carried out in 15 Austrian companies.

Based on the literature review, CI is defined as follows:

"As a process CI can be defined as the continuous, systematic, legal and ethical way in which a company scans its internal and external environment, and here especially the competitive aspects of the firm's environment, gathers and analyzes publicly available information and in a last step uses this processed information to aid operative and strategic decision-making. When thinking of CI as a product, CI can be defined as the final outcome of the whole CI process and therefore CI is also the informed foundation which supports managers in their decision-making."

While looking at topics such as the Austrian CI practitioners' familiarity with the CI term, the organizational CI setup (e.g. departments responsible for CI, number of CI employees, CI budget, etc.) and the CI process flow (e.g. CI process stages, dissemination of CI, etc.), it was revealed that CI in Austria is approached in a rather unsophisticated way partly due to its novelty.

Additionally, the initial literature review yielded another gap in the existing literature that this study wants to close, namely the topic of CI value measurement. In the current academic literature a few attempts were made to fill this gap but without any considerable success. Hence, CI practitioners still have to deal with the challenge of

justifying their work without being able to measure the outcomes of CI. CI value measurement and related topics were therefore also looked into both in the course of the literature review and in the course of the empirical study.

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Introduction

### **1** Introduction

"Information really is the most value (sic!) commodity we have. It's a very liquid form of capital and you can leverage it in so many different ways."

Scott Garvey (as quoted in Brown, 2001, p.5)

This quotation points out what most of the existing literature on competitive intelligence promotes, namely that information is seen as a necessary or even vital input for a company in order to achieve outstanding company success. Bill Gates (1999) takes the same line when he states that "The most meaningful way to differentiate one's organization from the competition is to do an outstanding job with information" (Gates, 1999, as quoted in Abukari and Jog, 2002, p.45). All in all today's business literature suggests that with the proper use of information firms can create an exceptional competitive advantage.

However, as already mentioned above, only with proper handling and use of information can such an advantage be generated by the company. Information in its purest form does not, on its own, create a competitive advantage. There are several explanations for this. On the one hand there is the possibility of non-use of information, which means that the necessary information is readily available but not taken into account by the decision maker. On the other hand, information can also be used in a defective way, which can be referred to as symbolic use of information (see Menon and Varadarajan, 1992). As a matter of fact, information may even have a negative impact on the organizational success by absorbing major parts of a company's resources because they are required for handling and analyzing all the information. Such a negative effect of the information era can be called information overload. In Brown (2001, p.5), Garvey, the president of a CI-specialized consultancy, warns of this phenomenon when he is saying: "The trouble is there's often too much of it (information) and an organization may not realize what they have or how they can use it effectively."

This introduction briefly shows the positive and negative effects that the vast amount of readily available data that exists today may have on companies. The question is now how businesses can take advantage of the positive effects without suffering from the negative effects in the form of information overload, because "(...) in the coming years, the most successful businesses will be those that figure out how to extract real knowledge from the information flowing through their systems and proliferating out on the Web and use it as a competitive advantage." (Weier, 2007). A very popular catchword that has often been mentioned in this regard is the concept of competitive intelligence (CI), which will be further explored throughout this thesis. A systematic CI process can help a company to cope with and benefit from the huge amount of publicly available data by continuously gathering and analyzing freely available information regarding one's competitors.

#### **1.1 Research Objectives**

This diploma thesis aims to explore the development stage of CI in Austria and shows in more detail how CI is conducted within Austrian companies. Questions such as: "Is CI conducted at all in Austrian companies?" and "In which way is CI conducted in Austria with regard to organizational factors, CI data collection issues, inter-company CI process, etc.?" are going to be analyzed. A literature review has shown that CI practices in Austria have never been explored.

The second research objective is to further examine a major problem within the field of CI, namely the measurement of the CI value. Until now, it was not possible to find a commonly agreed way for measuring the CI value, nor in theory or in practice. The thesis tries to establish whether the CI value gets measured at all and if yes, in what way it is measured in Austrian companies.

This diploma thesis addresses the current gap in the literature on CI practices in Austria by (a) developing a definition of CI based on a comprehensive literature review conducted in two phases, (b) summarizing the literature on CI value measuring and (c) an explorative research on CI, carried out in 15 Austrian companies, providing insights into the reality of CI practices in Austria. The qualitative research (i.e. in-depth interviews with CI practitioners in Austria) was conducted in order to highlight the predominant development stage of CI practices in major Austrian companies.

In a last step, research propositions are generated from the findings of the literature review as well as from the findings of the qualitative research, in order to form the basis for further research on this topic.

#### **1.2** Structure of the Thesis

**Chapter 2** of the thesis will look into the existing literature on CI. The extensive literature review will first provide an overview of different definitions of CI based on which a definition of CI will be developed for the purpose of this research, which will then be used throughout this thesis. Second, a brief introduction into the scope of CI and an explanation of tactical and strategic CI will be given. In a next step, findings of relevant country-specific empirical studies on CI will be provided. Finally, chapter 2 will end with a review of theoretical attempts of measuring the benefits and value of CI.

In **Chapter 3**, the research gap will be briefly highlighted and the research questions that will be investigated throughout this work will be presented.

**Chapter 4** will give a review on the methodology used in the empirical study. This includes a description of the research method and the sample, as well as the presentation of the interview guide and an overview of the analysis method.

**Chapter 5** will show the findings of the empirical study conducted by the author of this thesis. The detailed findings and analysis of the applied research method, i.e. a qualitative study with 15 in-depth interviews will be shown.

Next, **Chapter 6** of this thesis will provide answers to the research questions elaborated in Chapter 3. This will be done by integrating literature with the findings of the empirical study. Additionally, research propositions for future research will be derived.

**Chapter 7** will round up this thesis by giving a summarizing conclusion.

### **2** Literature Review

#### 2.1 Definitions of Competitive Intelligence

A literature research on CI revealed a lack of a precise and generally accepted definition of CI. Instead, a variety of partly differing definitions can be found. The examples below illustrate the range of definitions in relevant literature.

For example, CI was defined by Heath (1996, p.54) as "(...) the process of gathering actionable information on the competitive environment". This definition is

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Literature Review

problematic because it only focuses on the gathering of information and ignores the rest of the CI process, such as the processing and the analysis of the data and the dissemination of the CI findings. The following definition by Bitpipe (1998-2006) closes the above mentioned gap by taking the analysis and application of the gathered information into account. CI is therefore defined as "(...) the process (of) gathering, storing, analyzing, and providing access to data to help enterprises make better business decisions" (Bitpipe, 1998-2006). Nevertheless, this definition has also its shortcomings by not clearly defining in which way the whole CI process should be carried out, namely in a systematic, legal and ethical way. Kahaner (1996) finally fills this gap when he describes that the whole CI process has to be approached in an ethical and therefore legal way. He also mentions the need for a systematic CI program and touches an important point by saying that CI can influence and aid the decision making process within a company but it does not necessarily have to (Kahaner, 1996). Here, the information non-use and "bad" use of information mentioned previously come into play.

Other CI definitions, such as the one below given by members of the University of Ottawa, seem to ignore that the pure collection of information in the course of the CI process does not make the firm more competitive, especially if the information gets ignored later on when it comes to making a decision. "It is a formal decision making system focused on understanding the environment. At a simplistic level, competitive intelligence (CI) can be defined as information that makes the firm more competitive." (University of Ottawa, http://intelligence.management.uottawa.ca, "Business and Competitive Intelligence for Innovation").

The following definitions focus on a problem that was already touched in less detail above, namely the common problem that CI is often associated with illegal and unethical practices such as digging in other companies' garbage or bribing a competitor's employee in order to obtain important trade secrets. Therefore the definitions below make clear that CI is anything but an illegal or unethical practice: "The objective of competitor intelligence<sup>1</sup> is not to steal a competitor's trade secrets or other proprietary property, but rather to gather in a systematic, overt (i.e. legal) manner a wide range of information that when collated and analyzed provides a fuller understanding of a competitor firm's structure, culture, behavior, capabilities and

<sup>&</sup>lt;sup>1</sup> Note: Competitor intelligence can be defined as a sub area of competitive intelligence, purely focusing on a company's competitors (see Wright and Calof, 2006, p.454; Wright et al., 2002 as quoted in Tarraf and Molz, 2006, p.25).

weaknesses." (Sammon et al., 1984, p.62). Richardson and Luchsinger (2007) state in this respect that "Competitive Intelligence is a legitimate attempt to provide information about competitors and environments" and further say that "Competitive Intelligence is not to be confused with espionage. Espionage is unlawful and unethical. Competitive Intelligence is legal and associated with a detailed code of ethics." (Richardson and Luchsinger, 2007, p.41f). To make sure that CI practitioners do not get involved in illegal and/or unethical activities, the professional body of the CI practitioners, the Society of Competitive Intelligence Professionals (SCIP), has published the "SCIP Code of Ethics for CI Professionals"<sup>2</sup> to which all of their members have to adhere. The issue of CI and ethics has always been a very important topic as demonstrated by the vast amount of academic articles (e.g. Hallaq and Steinhorst, 1994; Trevino and Weaver, 1997; Ehrlich, 1998) and articles in popular business magazines (e.g. Bartram, 1998) that have been published about this particular topic in the recent years.

The CI definition of Clew (2003) also contains the above mentioned legal and ethical aspect and describes at the same time all major parts of the CI process, such as the analysis of the data and the application of the obtained results: "Competitive intelligence is the legal, ethical and systematic method of gathering meaningful and often hard-to-obtain data and, through analysis, transforming it into intelligence that is actionable." Another, similar CI definition comes from Hendrick (1996): "Competitive intelligence means ethically collecting, analyzing, and disseminating accurate, relevant, specific, timely, foresighted, and actionable intelligence regarding the business environment, competitors, and the organization itself. (...) The end result should be answers that offer a course of action to execute" (Hendrick, 1996, p.8).

The last two definitions of CI presented above have only one shortcoming as they regard CI purely as a process while the following definitions show that CI can also be seen as a product. In this sense CI is defined as "(...) timely and fact-based data on which management way (sic!) rely in decision making and strategy development. It is obtained through industry analysis, which means understanding all the players in an industry; competitive analysis, which is understanding the strengths and weaknesses of competitors (Society of Competitive Intelligence Professionals). It is also information that tells us how competitive the firm is. It is understanding the competitive arena, being able to predict competitors' and customers' intentions, government actions, and so forth." (Zanasi, 1998, as quoted in Paterson, 1999). The last quotation illustrates that CI

<sup>&</sup>lt;sup>2</sup> For more information see http://www.scip.org/2\_code.php (Accessed 10.05.2006).

is not only perceived as the process that describes the way how a company handles all the legally available data about its competitors and about the whole environment in which the firm operates, but that it is also sometimes defined as a product, the outcome of the competitive intelligence process that other authors define as competitive intelligence. However, it appears difficult to draw a line and to categorize CI as a process or a product as it comprises characteristics of both. "Competitive intelligence, also known as business intelligence, is both a process and a product. As a process, CI is the set of legal and ethical methods a company uses to harness information that helps it achieve success in a global environment. As a product, CI is information about competitors' activities from public and private sources, and its scope is the present and future behaviour of competitors, suppliers, customers, technologies, acquisitions, markets, products, and services, and the general business environment." (Vedder et al., 1999, p.109). Other authors such as Prescott (1999) see CI as a dualistic term, defining CI as a product as well as a process: "Ultimately, competitive intelligence is not only a product, but also an organizational process designed to serve several key roles including early warning of opportunities and threats, decision making support, competitor monitoring and assessment, and strategic planning support." (Prescott, 1999, p.43).

The already put forward definitions of CI reveal the need for a commonly agreed CI definition. Hannula and Pirttimaki (2003, p.593) criticize this lack of a consensus on a CI definition in the academic literature. This problem should be addressed in future research.

Another challenge regarding the conceptualization of competitive intelligence is that a different term, i.e. business intelligence (BI) is often used synonymously (e.g. Vedder, 1999, p.109). Again the literature does not provide a generally agreed conception of BI and for some authors CI and BI are terms that can be used interchangeably while others highlight differences between the two. Hannula and Pirttimaki (2003, p. 594) for example use both terms interchangeably and ask company officials under what heading they place their business information acquisition and analysis process. Heath (1996) distinguishes between CI and BI and mentions that "(...) some specialists believe it should be called business intelligence because it encompasses the entire universe in which a firm does business, not just the competitive aspects." (Heath, 1996, p.54). In the same direction goes Cavalcanti (2005) in saying that "(...) BI is considered to cover a wider spectrum than competitive intelligence. While CI

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focuses mainly on the micro environment, BI includes both the micro and macro environment." (Cavalcanti, 2005, p.9). These two definitions of the differences between CI and BI focus on their scope whereas H. Gieskes<sup>3</sup> tries to explain the distinction between the two concepts by means of the sources from which a company collects its data. He mentions that the difference between the two processes is "(...) that the former (CI) comes from a company's own staff and lots of external data while the latter (BI) largely originates from internal systems (...)" (Gieskes, 2000, p.10).

This thesis is going to follow the example of Stankeviciute et al. (2004) who use the terms competitive intelligence and business intelligence interchangeably, because "Although from a strictly academic perspective, differences between these two concepts could be pointed out, in practice they often bear the same meaning." (Stankeviciute et al., 2004, p.41).

Following this presentation of a few different definitions and concepts of CI as well as BI, a definition of CI will be developed by the author of this thesis. This definition will be applied throughout the whole thesis.

CI will be defined as a process as well as a product. In this respect this work follows the example of authors such as Vedder et al. (1999) and Prescott (1999) because such a definition of CI is the most effective one for the purpose of this study, especially with regard to the empirical part of this thesis. This view stems from the knowledge that has been acquired during qualitative interviews with Austrian CI professionals, among whom both perceptions of CI, i.e. CI as a process and as a product, are common. Therefore, both concepts have to be integrated in this study.

The following CI definition has been developed for the purpose of this thesis and will be used throughout the whole work: "As a process CI can be defined as the continuous, systematic, legal and ethical way in which a company scans its internal and external environment, and here especially the competitive aspects of the firm's environment, gathers and analyzes publicly available information and in a last step uses this processed information to aid operative and strategic decision-making. When thinking of CI as a product, CI can be defined as the final outcome of the whole CI process and therefore CI is also the informed foundation which supports managers in their decision-making."

<sup>&</sup>lt;sup>3</sup> Note: H. Gieskes is a former CEO of Lexis-Nexis.

This CI definition integrates the most important parts of the above mentioned CI definitions by authors such as Heath (1996), Kahaner (1996), Sammon et al. (1984), Zanasi (1998), Vedder et al. (1999), Prescott (1999).

To avoid any confusion among the survey respondents and to create a single frame of reference amongst them, CI as a product was denominated as CI information throughout the qualitative interviews.

#### 2.2 The Scope of CI – Strategic vs. Tactical Intelligence

In order to better understand the purpose of CI and to be able to better realize in which ways a company can benefit from CI, this section shortly points out the differences between strategic and tactical intelligence.

Tactical intelligence focuses on short-term operative goals and supports the daily business whereas strategic intelligence is sought to support long-term strategic decisionmaking. In a benchmarking study for the American Productivity & Quality Center, Carlin et al. (1999) work out the differences between strategic and tactical CI: "Strategic intelligence is future-oriented and allows an organization to make informed decisions concerning future conditions in the marketplace and/or industry. It also helps decision makers discern the future direction of the organization. Ultimately, over time, strategic intelligence facilitates significant organizational learning. Tactical intelligence is present-oriented. This level of intelligence provides organizational decision makers with the information necessary to monitor changes in the company's current environment and proactively helps them search for new opportunities. Tactical intelligence is real time in nature and provides analysis of immediate competitive conditions." (Carlin et al., 1999, p.6). The above quote offers an excellent outline of the differences between strategic and tactical intelligence. Culver (2006) remains along the same lines and argues that "(...) tactical intelligence can be defined as information and analysis about competitors that can support the daily operations of a company." (Culver, 2006, p.17) and, interestingly, she mentioned that tactical CI might even contribute to strategic CI (Culver, 2006, p.17). To draw a distinction between the two is important, because whether a firm focuses on the one or the other influences the whole CI approach of a company. For example, the type of collected information greatly depends on whether a company focuses on strategic or on tactical CI.

As some of the CI definitions in the previous part of this work have already suggested, the final purpose of CI is to support the management in making more informed decisions. But what kind of decision making can be supported by the CI process? A few authors (e.g. Barson, 2002, p.69) limit the result of a company's CI process to its strategic implications. Puzzle (2002-2005), specifies "(...) to obtain competitive advantages and to give answers to questions with strategic nature (...)" as the objectives of the CI process. However, a company does not only benefit from the strategic aspects of CI, but CI can also help to improve the tactical decision making process of employees from all different levels of hierarchy.

Again, differing opinions exist in literature, where it is widely discussed if competitive intelligence should solely focus on strategic decision-making or support tactical goals as well. Prescott (1999, p.39) describes the change in the primary objective of CI professionals that took place over the last few decades. This objective moved from delivering tactical intelligence towards the "creation" of intelligence that supports the strategic decision making process of management.

Many authors (e.g. Abukari and Jog, 2002; Prescott, 1999) share the view of Heath (1996) who says that "(...) competitive intelligence should be used to support both short-term tactical and longer-term strategic goals." (Heath, 1996, p.54). Carlin et al. (1999, p.6) go one step further in saying that the coordination of the strategic and tactical levels is necessary in order to maximize the potential benefit of CI. Miree and Prescott (2000) speak about an unfortunate conceptual and operational separation between tactical and strategic intelligence that has taken place in the literature and among practitioners. As a negative result of this separation, practitioners handle strategic and tactical CI as two separate things and often only focus on either one of the two. "This is unfortunate because strategic and tactical intelligence interact in many synergistic ways." (Miree and Prescott, 2000, p.5).

Summarizing, it can be said that both tactical and strategic decision-making can and should be supported by the CI process, but it also has to be noted that the focus of CI practitioners has clearly shifted towards strategic issues at the expense of the tactical side of their businesses.

#### **2.3** Empirical Studies on Competitive Intelligence around the World

Regarding the literature on CI and hereby especially country-specific studies, CI as a company practice appears to be very popular in the United States, with most of the literature related to this topic stemming from US-based researchers and/or practitioners. Outside the USA only a few empirical studies have been published by European researchers and here especially by German and British authors. This corresponds to the view of Teo (2000) who says that "Empirical studies on competitive intelligence are often conducted in the United States (e.g., McCrohan, 1998; Folsom, 1991) or Europe (e.g. Brockhoff, 1991)" (Teo, 2000, p.62).

Below, a few selected country-specific empirical studies on CI from different parts of the world are presented in order to give an overview on what has already been addressed in previous studies.

An often cited study by Prescott and Bhardwaj (1995), which was undertaken in North America and focuses on Society of Competitive Intelligence Professionals (SCIP) members, sheds a light on CI practices and tries to systematically describe and analyze them. Their survey was divided into eight different parts, namely general background information (demographics on company and interviewee), background information on CI practices in the company (CI unit size, etc.), CI unit's mission, sources of CI information, different types of monitored intelligence, analytical techniques used, dissemination of CI and general issues the CI programs are currently facing. The survey instrument of this study was replicated twice, exploring the CI situation in two Asian countries, namely China (see Tao and Prescott, 2000) and Japan (see Sugasawa, 2004).

In the Japanese study a few questions of the original instrument used in Prescott and Bhardwaj's (1995) study were "(...) deleted due to differences in industrial sectors between Japan and the U.S." (Sugasawa (2004), p.8). Tao and Prescott's (2000) study seems more significant because of the diverse nature of the chosen sample and the sample size. Their sample was drawn from the members of the Society of Competitive Intelligence of China (SCIC) and the questionnaires were sent out via mail. They achieved a high response rate and the respondents came from a wide range of industries. For comparison, Sugasawa's (2004) study targeted the participants of the 6<sup>th</sup> Competitive Technical Intelligence seminar in 2003 and faced the challenge that only a small part of the 67 responding companies had already implemented competitive

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intelligence as an internal corporate practice by that time, therefore reducing the valuable insights into Japanese CI practices, which could have been gained through this study, to a minimum. These three studies above were highlighted because they all used approximately the same survey instrument, which seems to be very appropriate to generate first findings about the CI development stage in a particular country.

Author	Prescott and Bhardwaj (1995) <sup>4</sup>	Tao and Prescott (2000)	Sugasawa (2004)	Hannula and Pirttimaki (2003)			
Study name	Competitive Intelligence Practices: A Survey	China: Competitive Intelligence Practices in an Emerging Market Environment	The Current State of Competitive Intelligence Activities and Competitive Awareness in Japanese Businesses	Business Intelligence: Empirical Study on the Top 50 Finnish Companies			
Country	North America	China	Japan	Finland		Finland	
Industry sector	mixed	wide variety (mainly academic research, industrial products and transportation)	wide variety (mainly industrial and consumer products)	manufacturing, trade and services, information and communication technology			
Sample size	n.a.	164 valid responses (response rate: 37,8%)	67 valid responses (response rate: 67%)	46 valid responses (response rate: 92%)			
Unit of analysis	SCIP members	SCIC (Society of Competitive Intelligence of China) members	Participants of 6th Competitive Technical Intelligence seminar in 2003	Top 50 Finnish companies			
Qualitative vs. Quantitative	quantitative survey	quantitative mail survey + follow-up survey to CI-using managers + eight qualitative in- depth case studies	quantitative survey	quantitative telephone survey			
Topics	background information, CI setup, CI unit mission, sources of CI information, types of monitored intelligence, analytical techniques, dissemination of CI, current CI issues	background information, CI setup, CI unit mission, CI budget, code of ethics, characteristics of CI personnel, CI products and services, perceived benefits and problems associated with CI, differences between CI in China and the USA	background information, background on Cl in organization, Cl unit mission, source of Cl, types of intelligence monitored, analytical techniques used, dissemination of Cl, general issues with Cl	popularity of Cl practices + Cl methods			
Key Findings	n.a.	Chinese firms are still experimenting with administration and structure of CI programs; Chinese CI units are much larger than such units in American companies; Observed need for adoption of code of ethics	Japanese companies have a different CI approach and are undertaking different activities than American and European organizations; Japanese firms show strong interest in CI but do not apply any specific analytical methodology	CI very popular among Finnish companies			

 Table 1: Important empirical country-specific studies on CI

<sup>&</sup>lt;sup>4</sup> As described in Tao and Prescott (2000) and Sugasawa (2004).

Another similar study that was also trying to gain a general understanding of the CI landscape in a particular country, but used their own survey instrument and a slightly different approach, was conducted by Hannula and Pirttimaki (2003), who carried out a telephone survey targeting the Top 50 Finnish companies in order to find out how popular CI practices are and in which way CI is currently applied in Finland.

In several other countries, such as Singapore (see Teo, 2000), Australia (see Bensoussan and Densham, 2004), Canada (see Calof and Brouard, 2004), Germany (see Michaeli, 2004), Israel (see Belkine, 2004), Korea (see Kwangsoo and Seungjin, 2004), Lithuania (see Stankeviciute et al., 2004), New Zealand (see Hawkins, 2004), Spain (see Tena and Comai, 2004), Sweden (see Hedin, 2004), the UK (see Wright and Pickton, 1998; Wright et al., 2002; Wright et al., 2004) and South Africa (see Viviers et al., 2005) empirical studies on CI in general or studies regarding more specific areas within the field of CI, such as Calof's (1997) study on Export Intelligence acquisition modes of Canadian enterprises, have been carried out.

Literature research did not reveal any empirical studies on CI practices solely focused on CI in Austria. The purpose of this thesis is to close this gap in literature and to research the CI practices of Austrian companies. First of all, such a study will help Austrian companies by providing information on the state-of-the-art of CI practices in Austria. This allows them also to compare their practices with the practices of other companies within their country. Second, the results of this thesis can also be used for a comparison with findings of similar studies in other countries and in a next step to come to conclusions whether the CI practices in a small European country are different from the activities in other countries, such as the USA or China. This study should also be of particular interest for Austrian CI practitioners, to see what needs to be done to further promote their field of expertise.

#### 2.4 Measuring the Outcomes and Benefits of CI

The empirical part of this study does not solely focus on issues like the development of CI in Austria or the organizational circumstances of CI practices in Austrian companies because the review of the existing CI literature yielded another gap in the existing literature that this study wants to close. As a matter of fact, CI

practitioners around the world have to deal with the challenge of justifying their work without being able to measure the outcomes of their activities. In the current academic literature a few attempts were made to fill this gap but they were not very successful, as the literature review in this next section shows.

As Andrews (1987) brought up, "(...) relationships between a firm and its environment affect performance." (Andrews, 1987, as quoted in Prescott, 1999, p.43). The implication of this quotation has a direct impact on how CI is perceived today, as it means that if CI can help to improve the way a company observes and handles its environment, CI is supposed to have a direct positive impact on company performance.

This positive impact of CI on company performance is mentioned by several different authors (e.g. MacKay, 2001, p.23; Lackman et al., 2000, p.6) when describing the effects of CI on a firm. Jaworski et al. (2002), for example, describe the process of CI as "(...) just an intermediate step to a higher order objective – that of superior business performance," (Jaworski et al., 2002, p.300) and outline several hypotheses regarding the relationship between CI and business performance.

It is commonly agreed that CI directly impacts the bottom line of a company, although a proof for this assumed impact could not be identified. The major question that researchers in the field of CI have tried to answer and still face is whether companies are able to quantify the benefits they gain from their CI processes. The literature research showed that measuring the outcomes of CI has always been a major problem. Regarding this topic, Fuld and Borska (1995) stated: "Unfortunately, no financial ratio exists to measure return on investment for intelligence systems." (Fuld and Borska, 1995, p.24). More recently, Prescott (1999, p.50) concluded that the evaluation of CI programs and products has shown a slow development and he also mentions that even the benchmark firms did only marginally focus on developing CI performance indicators. For Prescott this is therefore not only a problem of small and medium sized companies who do not have the resources for developing such a measurement method. Hence, for Prescott this is a rich area for further research.

The results of the already mentioned survey undertaken by Dr. Yoshio Sugasawa (2004) among 100 Japanese companies suggest "(...) significant problems in the area of "measuring the value/effectiveness of competitive intelligence" (...)" (Sugasawa, 2004, p.16). Interestingly, for the question about the benefits of CI, the answer "increased

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revenues and/or profits" scored the worst results, which may be directly linked to the perceived absence of measuring abilities, as it is difficult to link CI directly to the bottom line success of a company without adequate measuring tools. As has already been pointed out, despite the high response rate, the results of this survey have to be viewed with caution because only 17 of the replying companies had already implemented CI as an internal corporate activity at that moment.

In the survey conducted by Hannula and Pirttimaki (2003) almost 30 percent of the respondents, BI managers in the top 50 Finnish companies, "(...) hope the methods for measuring the benefits of BI will develop within the next five years. Currently, measuring is not being done as either no suitable measurement methods have been identified or the companies have no resources for such activity." (Hannula and Pirttimaki, 2003, p.597). Furthermore, the authors point out the main problem this measurement "dilemma" brings about, namely that, without the availability of commonly agreed measurement methods, it might be hard for CI practitioners to prove the benefit of CI activities. This proof of benefit is important in order to either convince the top management of the need for a systematic CI process or to receive more resources in a case where such a process has already been implemented. Vedder et al. (1999) also mention the difficulties managers might have in justifying CI budgets without being able to measure their performance. Tao and Prescott (2000) observe the same challenge regarding the justification of resources required by CI activities, in the absence of a useable measurement solution, in their study about Chinese CI practices when stating "As their counterparts in developed countries, Chinese CI practitioners need to prove the value of CI program to their users." (Tao and Prescott, 2000, p.74). A survey conducted by them in China yields nearly the same results as the study of Hannula and Pirttimaki (2003), especially regarding the perceived main problem associated with CI, namely the lack of helpful measurement tools. The study of Tao and Prescott seems to be more representative than the survey among the Top 50 Finnish companies because of the larger sample size combined with a high response rate and a wider range of industries covered by the respondents. The Finnish and the Chinese studies perfectly demonstrate that CI practitioners all over the world have to cope with the same problems.

The development of agreed measures could, according to Marin and Poulter (2004), greatly help in raising the reputation of CI practitioners in their own companies. The limited amount of data on CI value measurement generated through their secondary

research led them to incorporate this topic in a questionnaire used in a qualitative research addressed to the members of the Society of Competitive Intelligence Professionals (SCIP). This qualitative survey again confirmed "(...) that few organizations have any mechanisms in place to measure the value of competitive intelligence (...)" (Marin and Poulter, 2004, p.176).

The following section presents the work of the few authors who tried to overcome this problem in academic literature and who wanted to shed a light on the effect CI has on company performance. Most of them examined the relationship between CI and company success by using surveys in which the respondents had to self-assess their company's CI process development stage as well as their company's performance (e.g. Fourie, 1998, as described in Hawkins, 2004). Walters and Priem (1999) used Dess and Robinson's (1984) scales to measure the financial performance of the interviewees' firms. During this approach the study respondents are asked to compare the financial performance of their own company with the performance of other similar companies. With the help of this tool they showed that CI itself is not the only success factor when seeking higher company performance. It all depends on the company's strategy. Whether a company tries to succeed as a differentiator or as a cost leader has a major influence on the effect a CI program might have on the overall performance. The main limitation of the studies of Fourie (1998) and Walters and Priem (1999) is, in both cases, that the performance measures were based on self-reported information and the results are therefore committed to the subjective self-assessment of the companies.

Another attempt in drawing a connection between CI and a company's financial performance was done by comparing the earnings per share of companies with and of companies without well-established CI programs. With the help of this method, King (1997) showed that, on average, companies with highly-developed CI processes exhibited higher earnings per share than those without such programs. This method can show a broad tendency but again is not able to exactly specify the influence of CI on company performance because of the limitations the use of earnings per share entails. Many other factors, such as alternative accounting methods, can have a big influence on the EPS results and it is therefore hard to link the higher earnings per share to the CI development stage of a company. Furthermore, as was already explained in the introduction, a well-established CI system does not mean that the collected information is used in a good manner or is used at all.

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One of the most interesting studies of the last few years in this field was done by Subramanian and IsHak (1998). In their study they found evidence for a relationship between a company's performance and the advancement of its CI system. One of their key results was that "Firms having advanced systems to monitor their competitors' activities exhibited greater profitability than firms that did not have such systems." (Subramanian and IsHak, 1998, p.7). The authors used "Return on Asset" as their measurement of profitability. To be able to classify the companies according to their CI processes' level of advancement, Subramanian and IsHak asked the respondents three questions regarding their companies' CI process. Here again the subjective selfassessment and the non-observation of the CI information use represent limitations of this study.

Furthermore, all the empirical studies that were presented above share one major drawback. None of them was able to examine the cause and effect relationship between the degree of advancement of a company's CI process and its performance. None of the studies examined whether the CI-active firms succeed more than other companies because of their dedication to CI or if it is the other way around, i.e. successful companies are more likely to invest in CI. Additionally, all the previously mentioned studies carried out a multi-company study in order to look at the CI value. This is a good way for measuring the CI value in general or within a specific industry but such a method does not enable a single firm to measure the specific value of its own CI activities.

Davison (2001) used the insights of the advertising industry, where managers face similar difficulties in estimating the effectiveness of their work and incorporated these insights into a theoretical model. His study resulted in the creation of the Competitive Intelligence Measurement Model (CIMM). The model's aim is to facilitate the calculation of the return on competitive intelligence investment (ROCII). The model describes the CI output as effective in a case where the "Value of CI outputs" is bigger than the "Value of CI inputs" and therefore the ROCII can be calculated as

> (Value of CI outputs – Value of CI inputs) Value of CI inputs

Additionally, Davison separates both, CI outputs and CI inputs, into tactical and strategic outputs and into inputs, respectively, and accordingly divides the ROCII in strategic ROCII and tactical ROCII. This allows to better quantify the different components that constitute the CI output. Figure 1 shows a diagram of Davison's CIMM.

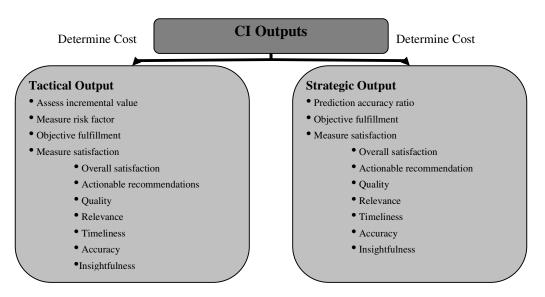


Figure 3: Competitive Intelligence Measurement Model (Source: Davison, 2001, p.33)

This model is a good starting point but will again fail in practice because it does not facilitate the adequate quantification of the CI output to be able to directly measure the CI programs' influence on the company performance.

The literature review shows that a few attempts have been already made to prove the effect CI might have on business success but overall it is obvious that academic researchers face the same problems as CI practitioners do in quantifying the outcomes of the CI process. As time goes by, research methodologies will further advance and the intangible benefits of CI will probably become visible.

In the course of this empirical study the focus will also be put on the link between CI practices and their effect on company performance. In this respect, the aim is to investigate whether any specific CI value measurement methods exist in Austrian firms. Additionally, the challenges for Austrian CI practitioners that might occur because of this measurement dilemma will be shown in this thesis.

### **3** Research Questions

The definition and conceptualization of CI as well as the ways of measuring CI is solely based on the findings of existing literature. The research conducted in connection with this thesis was limited to (a) the current stage of CI practices in Austria and (b) the ways how Austrian CI practitioners deal with the problems incurred around measuring the CI value. The study can also be used to compare the sophistication of CI in Austria with the one in other countries.

#### 3.1 CI development stage in Austria

#### Familiarity of Austrian CI practitioners with CI term:

CI is a rather new topic in European management literature, therefore it is vital to establish the respondents' familiarity with the CI term and their understanding of the aforementioned.

RQ 1a: How familiar are Austrian CI practitioners with the term CI?

RQ 1b: How do Austrian CI practitioners define CI?

RQ 1c: Which terms are used to describe CI activities in Austrian companies?

#### Organizational factors:

Since this is the first thesis on CI in Austria, it is necessary to gain some exploratory insight on the environment in which CI work is implemented in Austrian companies. Therefore it is important to shed light on the organizational set-up of CI in Austrian companies.

RQ 2a: Who (in terms of job position) is responsible for CI in Austrian companies?

RQ 2b: Which departments are responsible for CI work in Austrian firms?

RQ 2c: What types of resources (employees & budget) are assigned to CI in Austrian companies?

RQ 2d: Is it possible to relate specific differences in terms of CI organization to certain differences in company characteristics (e.g. type of industry, size, etc.)?

Data collection issues:

Gathering CI data is the initial stage of the CI process. A major part of the following stages of the CI process depends on the information collected and the sources used.

RQ 3a: What type of information is collected with regard to CI?

RQ 3b: What type of information sources are used during the CI process?

CI process:

The following research questions, which regard the CI process itself, were chosen to investigate in which way and to what degree of sophistication Austrian CI practitioners conduct their CI work.

RQ 4a: Which stages of the CI process seem important for Austrian CI practitioners?

RQ 4b: Which kind of CI work is predominant, ad-hoc or planned CI work?

RQ 4c: What kind of technical aid is used to support the CI work?

RQ 4d: How and to whom is the CI information disseminated?

RQ 4e: Is the CI output mainly used in a tactical or in a strategic way?

Perceived benefits of CI and measurement of the CI value:

Since the perceived benefits of CI and measuring the CI value are key issues of this thesis, the following research questions were investigated with regard to these topics:

RQ 5a: What are the reasons for CI use and what are the perceived benefits of CI?

RQ 5b: Do Austrian companies measure the value of CI? If yes, how do they measure the value of CI? If not, why do they not measure the value of CI?

RQ 5c: Are there any problems related to not being able to measure the CI output?

RQ 5d: What is the current role of CI within Austrian companies and how does the future of CI within Austrian companies look like?

### 4 Empirical Study – Methodology

#### 4.1 Research Method

Initially, a quantitative study on CI practices within Austrian companies was planned. While trying to find a way to easily identify the right contacts in Austrian companies, the first difficulties occurred. Due to the novelty of CI practices in Austrian companies and the often confidential status this topic has, it is not easy to make a sample available that is broad enough. After the conduction of three expert interviews for the purpose of questionnaire development, it became clear that a qualitative research with in-depth interviews seemed more appropriate and promising in order to explore CI practices within Austrian companies, as CI practices and awareness varied widely. Therefore it was decided to engage in personal in-depth interviews (see Wilson, 2003). In-depth interviews were especially suitable for this study because this data collection method enables the interviewer to explore all the details (Craig and Douglas, 2005) regarding the topic at hand and makes it possible to directly interact with the study participants and immediately clarify possible misunderstandings.

Fifteen in-depth interviews, each of a duration from 20 to 60 minutes, were conducted during a time period of ten months (June 2006 to April 2007). The rather small sample size is appropriate, since the purpose of the research was to gain an insight into this rather un-researched topic (see Winklhofer and Diamantopoulos, 1996, p.53). The sample represents a well-balanced mix of major Austrian companies from different industries. All the interviews were recorded in order to facilitate further analysis.

#### 4.2 Sample Description

In total, the sampling frame consisted of 92 companies. Out of these companies, 15 CI practitioners were finally interviewed, which represents a response rate of 16.3%. The firms to be surveyed were identified in several different ways. In six cases the first contact to the persons responsible for CI was established with the help of Mag. Johannes Deltl<sup>5</sup>. Five other contacts were established with the help of people who already took part in the survey and gave the author further recommendations and contacts in the CI field. Therefore, part of the sampling process resembled a snowball sampling method. Four interview partners agreed to participate in the study after personal contacts had established the connection. Simultaneously, it was attempted to contact 77 companies out of the Top 100 Austrian companies, relying on the "Trend Top 500" list (Trend, 2006) as a sampling frame, which seemed an appropriate source for the purpose of this thesis. Out of these 77 companies 14 replied to the initial interview request. However, from these respondents none was able to finally follow the request. The reasons ranged from not being able to identify the right contact within the company to the confidentiality of the topic<sup>6</sup>. The response rate issue caused by the confidentiality of this topic was already described by other researchers, e.g. Wright and Calof (2006), who stated "No firm worth its salt is going to open its intelligence practice doors to intermittent investigation, so relationship building, new approaches which will get behind the reality of intelligence practice have to be found to advance the knowledge currently residing in the field." (Wright and Calof, 2006, p.462). Despite this confidentiality challenge, the final sample showed a wide variety in terms of business

<sup>&</sup>lt;sup>5</sup> Note: Mag. Deltl gave the initial impulse for a diploma thesis on CI in Austria. At that time he was running a consultancy specialized on CI. Due to his job position by that time he had established some very valuable contacts with Austrian CI practitioners. He is also the author of a book called "Strategische Wettbewerbsbeobachtung (Competitive Intelligence)" (Deltl, 2004).

<sup>&</sup>lt;sup>6</sup> Note: E.g. the representative of a petroleum company requested the interview guide in beforehand and was not willing to talk about their CI activities after having received the proposed questions.

field, company size and position of the contact persons. Ten of the surveyed companies belong to the "Top 100"<sup>7</sup> Austrian companies, showing that mainly big "players" were looked at. The reason for this is that from CI surveys conducted in other countries, it can be concluded that CI is a topic that first spreads within bigger corporations of a country before it gets widely accepted in small and medium sized enterprises. Table 2 gives an overview of some general company characteristics of the sample:

Company	Employees	Annual turnover	Industry	Market standing	Competitive intensity in industry	Served markets
_1	2.166	1.726.600.000€	telecommunications	market leader	very high	Austria
2	460	172.000.000 €	telecommunications	niche provider	very high	Austria
3	8.582	2.458.800.000 €	airline/transportation	established	very high	International
4	11.100	154.300.000.000€	banking	one of the market leaders	medium	Europe
5	1.797	834.100.000 €	energy supplier	regional market leader	low	Austria (regional)
6	240	26.500.000€	textile/sportswear	niche provider	high	Europe
7	11.991	4.200.000.000 €	automotive parts	dominating	medium - high	International
8	5.485	1.976.000.000 €	energy supplier	regional market leader	low - medium	Austria (regional)
9	9.973	2.071.600.000 €	energy supplier	regional market leader	low - medium	Austria (regional)
10	1.133	n.a.	banking	one of the market leaders	medium	Europe
11	2.100	191.000.000 €	sporting goods	market leader in one field + established in other field	high	International
12	2.600	1.150.000.000 €	pharmaceutical	established	medium	International
13	2.829	412.100.000 €	pharmaceutical	established	medium	International
14	12.893	3.383.500.000 €	insurance/financial services	one of the market leaders	medium	Europe
15	1.296	683.800.000 €	insurance	not dominating	medium	Austria + Germany

**Table 2: Sample Characteristics** 

The sample consisted of three energy suppliers, two telecommunications companies, two banks, two pharmaceutical companies, two insurance companies, one

<sup>&</sup>lt;sup>7</sup> According to the "Trend Top 500" list (Trend, 2006).

textile/sportswear producer, one sporting goods company, one airline and one automotive parts supplier. Five companies out of the sample only serve the Austrian market; one surveyed company serves Austria and Germany; four have a pan-European business focus and five operate internationally.

#### 4.3 Interview Guide

For establishing a certain degree of consistency and in order to touch the same topics during all 15 conversations, an interview guide was developed (see Appendix A) and applied during the interviews. This interview guide includes all the major topics around CI that are addressed in this thesis. To assure a maximum of flexibility during the conversation without missing to address any of the key topics, a semi-structured interview guide was used (Wilson, 2003). For the sake of a freely floating conversation, the sequence and formulation of the questions could be varied and adjusted to the individual responses. This made room for exploring the discussed topics more in-depth.

At the beginning of each interview, the interviewer explored the respondent's familiarity with CI and, to ensure the same frame of reference, asked the interviewee to give his definition of CI. Furthermore more specific questions regarding the CI work in the respective company and the possibilities of measuring the CI outcome were raised. The respondents were invited to comment and give their point of view on the following topics included in the interview guide:

(1) As already mentioned above, the respondents' familiarity with the underlying topic was first assessed and the respondents were asked for their **definition of CI**. The **familiarity with CI** was explored by asking whether the interviewee has ever heard the CI term before and whether the respondent knows what CI means.

These initial questions should on the one hand reveal the interviewees' actual familiarity with CI and on the other hand point out the respondents' point of reference when using the term "CI". This warm-up conversation was also important with regard to making the respondents feel comfortable by answering a question which was not specific to their company and by clarifying their level of knowledge regarding CI. Right after having answered the above mentioned questions, the respondents were asked to name the header under which CI-related work is done in their company. This request

created a perfect link to all the upcoming company specific questions. The interviewees' answers to these three questions gave all the required insights on RQ 1a, RQ 1b and RQ 1c.

(2) The next discussion point dealt with exploring the **CI process** within the respective companies more in depth. The respondents were requested to explain the CI process within their company in detail. If necessary, additional questions such as "Which departments are involved in the CI process?" were asked. Other supporting questions concerned the CI budget, the human resources involved in CI work and the technical side of CI (RQ 4c). However those questions were only asked when the respondents did not touch the key topics from their side. This discussion point contributed to answering RQ 2a, RQ 2b, RQ 2c, RQ 2d and furthermore RQ 4a, as highlighted in chapter 3.

(3) The next discussion point directly addressed RQ 3a and RQ 3b by exploring the **type of collected information** used during the CI process, the **ways of collecting this information** and the predominant **information sources**. With the help of an additional question, the attempt was made to prompt the respondents to distinguish between information collected and utilized on a national as well as on an international level. In this way the author tried to get an understanding of the internationally scope on which CI is conducted in Austrian companies.

(4) The respondents were furthermore asked whether they normally use **ad-hoc or planned CI work**. The interviewer was also questioning the existence of an annual CI plan in the respective company. The inclusion of this discussion point ensured the answer of RQ 4b.

(5) For the purpose of directly addressing RQ 4d, the respondents were asked to describe the ways of **CI dissemination** in their company and to name the **CI information receiver** within their company. Additionally they were requested to talk about the **field of application** of CI in their company. While already talking about the use of the CI output, the interviewer was able to explore the **tactical and strategic use of CI**. Therefore, this discussion point was also used to answer RQ 4e by revealing whether CI in Austrian companies is mainly used for strategic or tactical purposes.

(6) The next and one of the key points within the interview guide linked to the topic of perceived benefits of CI and measuring the value of CI. Depending on the already established relationship during the ongoing interview, the interviewer formulated the question on the perceived value CI creates in a more (i.e. "why do you practice CI in your company at all?") or less (i.e. "a lot of Austrian companies don't carry out CI at all, what kind of negative effects can they expect in comparison to a company that invests in CI?" or "imagine that your company would not invest in CI, what negative effects would you expect?") provocative way. These questions helped to address RQ 5a, while the next part of the discussion point helped to answer RQ 5d, namely what kind of role CI plays in Austrian companies at the moment and what role it will play in the future. An important aspect also pertaining to the perceived benefits of CI is the objective assessment of these perceived benefits and of the value CI creates for the company. Therefore the interviewer investigated whether the value of CI got measured at all by the respective companies and furthermore looked at the ways of measurement and the problems connected with this topic. The questions around CI value measurement were intended to answer RQ 5b.

(7) The final discussion point of the interview guideline was not linked directly to any research question; however it was an important one for concluding the interview with easy-to-answer questions in order to leave the respondents with a good feeling after the interview and herewith insure further cooperation if needed. The concluding questions dealt with the **respondents' personal career** and their current position. Furthermore the interviewees were asked to name other CI professionals that might be interested to participate in the study.

As already mentioned at the beginning of this section, the question sequences as well as the formulation of the individual questions were subject to changes, depending on the individual course of the interview. However, the interviewer brought the interview back to the reformulated questions when necessary in order to not digress too much from the subject and to touch all the necessary topics.

Due to the fact that all respondents were Austrian natives, all the interviews were conducted in German language and therefore the interview guide was also formulated in German.

#### 4.4 Analysis

As a systematic analysis strategy is especially crucial in the case of an exploratory qualitative research, a within- and cross-case analysis (depicted in Figure 2) following Miles and Huberman (2004) was undertaken. Hence, all interviews were first analyzed individually, focusing on each company separately. In a next step, a cross-case analysis was performed. During this analysis step, information from the whole sample was taken into consideration and each case was cross-analyzed in order to detect similarities and contrasts within the entire sample. Both analysis steps were equally important for drawing conclusions.

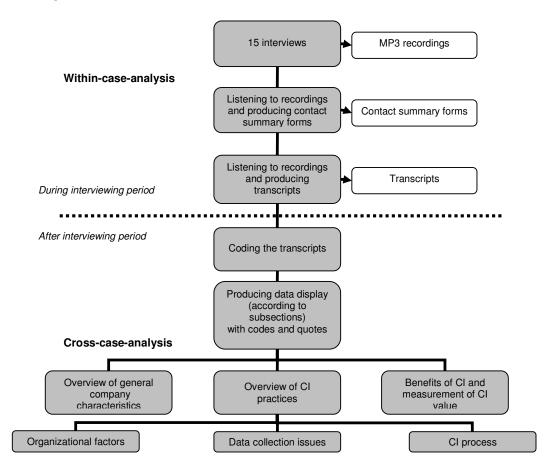


Figure 4: Overview of the analysis procedure

Before each interview the respondents accepted to be taped during the entire interview. Each interview was then recorded with a MP3-recorder. After each interview, a short summary of the topics discussed during the respective interview was produced with the help of the recording. For this purpose and in order to create a set of comparable documents, a contact summary form<sup>8</sup> was created and filled in by the author. This contact summary form included all relevant topics with respect to the interview guide and the research questions, i.e. the form integrated the company characteristics, the interviewees' familiarity with the CI term, CI organizational factors, CI data collection issues, the general CI process and perceived benefits of CI as the header topics. The purpose of this contact summary form was to give an initial brief overview of each interview.

The interviews were seen as a continuous learning process (Miles and Huberman, 2004), i.e. the author used the collected knowledge on "CI in Austria" from the previous interviews to ask more targeted questions and could respond better to the CI practitioners in the following interviews. Due to the limited time available between several interviews, it was not always possible to produce the full transcript right after the interview conducted. However, the respective transcripts were completed within a maximum of seven days after the interview. This tactic proved as very effective, as the time frame between interview and transcription of the interview was rather short and therefore the whole interview situation was still present and could be easily recalled while transcripting.

After the complete transcription of the interviews, a general coding system was developed. The codes were derived from the research questions as well as from the existing literature. In order to ease and fasten the coding process and also the analysis, the transcripts were shortened by removing all irrelevant information. Only information that was directly relevant for the research topic at hand was retained and processed for further analysis. The next step was the application of codes (Miles and Huberman 2004, p.55ff) to the abridged transcripts using the scissor and sort method. Therefore text segments out of the transcripts were cut out and assigned/pasted to the predefined codes/umbrella terms. Following Miles and Huberman (2004), the same coding system was used across all interviews. The text segments that were derived from applying the scissor and sort method were in a next step summarized in key words and integrated in a single data display. For this purpose an Excel spreadsheet was used because it seemed most appropriate. Each row represented an in-depth interview<sup>9</sup> and each column represented a code. In order to facilitate analysis and to support a clear understanding of

<sup>&</sup>lt;sup>8</sup> See Appendix B for the contact summary forms of all the interviews.

<sup>&</sup>lt;sup>9</sup> Note: Each in-depth interview/company received an identification number.

the cell entries, the most important quotes relating to the research topic were integrated as commentaries in the respective cells. Generally, all the interview findings that were integrated in the above mentioned data display were stored in the original interview language, namely German. This was done in order to not lose the implications of the words during the translation process.

#### *Cross-case analysis*

Miles and Huberman (2004, p.172ff) describe three different possibilities on how to proceed during a cross-case analysis. One possible approach is the so-called variable-oriented analysis. During this analysis, the researcher looks at one specific variable across all cases. Another cross-case analysis approach is the case-oriented approach, during which the researcher focuses on one case in depth and looks whether the patterns explored in this case or similar ones can also be found in other cases. The third possible cross-cases analysis approach integrates the two already mentioned approaches. Regarding these mixed strategies, Miles and Huberman (2004) state that "it's possible, and usually desirable, to combine or integrate case-oriented and variable-oriented approaches" (Miles and Huberman, 2004, p.176). For the purpose of this study, a mixed strategy was chosen, as for some research questions the causes and effects, which are addressed by the variable-oriented analysis, are of special interest, and for other research fields within this study the whole case environment and specific situations of each company, which are addressed by the case-oriented approach, play a major role.

All in all, the fact that the whole analysis is based on qualitative and not quantitative data and therefore cannot be analyzed with the help of statistical programs such as SPSS constitutes a minor limitation to the findings in such that the analysis might contain subjective opinions up to a certain degree. However, to avoid personal bias, third parties, i.e. persons not familiar with the research topic at hand<sup>10</sup>, were asked to give their opinions on drawn conclusions. Therefore, the results of this study represent a trustworthy first insight on the CI practices of major Austrian companies.

<sup>&</sup>lt;sup>10</sup> Note: Two business students who have never before heard about CI were identified for this purpose.

# **5** Findings

The presentation of the findings is structured in the same way as the research questions already presented in chapter 3 are: First, the familiarity of Austrian CI practitioners with the CI term and their definition of CI will be analyzed. In a next subsection the organizational aspects of CI practices within Austrian companies will be presented. Then, the data collection practices of Austrian CI workers will be highlighted and analyzed. Furthermore, several aspects of the CI process in Austrian companies will be illustrated. The last subsection of the findings will focus on perceived benefits of CI and questions around the measuring of the CI value.

# 5.1 Familiarity of Austrian CI practitioners with the CI term

Due to the fact that CI is a relatively new company practice in Austria, it was important to test the level of CI familiarity and CI knowledge of the interviewed Austrian CI practitioners before proceeding to more specific questions on CI.

### Respondents' familiarity with the CI term

As the opening question of the qualitative interview guide was whether the respondents had already heard of the English term "competitive intelligence", results revealed that most of the respondents were familiar with the term "competitive intelligence" or had at least heard it once and were able to place it correctly.

Familiar with CI term	yes	no
Total Number of companies (respondents´IDs)	<b>10</b> (1, 2, 3, 4, 7, 9, 10, 11, 12, 13)	<b>5</b> (5, 6, 8, 14, 15)

#### Table 3: Familiarity with CI term

However, one third of the respondents was not familiar with the English term. Some of the interviewees stated that they had never heard the English term before, because within their company they would use a German term instead. This is not very surprising because, as Michaeli (2004) put it, "(...) the term "competitive intelligence" doesn't mean a lot to non-English speaking Germans." (Michaeli, 2004, p.2). For example, the CI responsible from company 5 mentioned: "Mir war der englische Begriff nicht geläufig, wir sagen da Marktbeobachtung, Konkurrenz-, also Mitbewerbsanalyse(...)"<sup>11</sup>. Especially the abbreviation "CI" can create further confusion, e.g. the respondent from company 6 stated that "CI hat mich ein bisschen irritiert. CI ist bei uns Corporate Identity."

Interestingly, among the group of respondents who were not familiar with the CI term, companies out of two specific industries were predominant. Two companies within this group were energy suppliers and two others came from the insurance sector. The low competition level between energy suppliers due to the special regulatory history of this sector in Austria and the only recent liberalization of this market might be the reason for this observed lack of awareness of competitive processes. This special status of energy suppliers with regard to CI practices remains prevalent in the entire analysis. The above average percentage of insurance companies among the non-familiar group might have occurred because, according to company 14, due to the slowly moving and dull insurance market, there is less need for such company practices as CI. However, it has to be added that due to the rather small sample and the qualitative nature of the study such conclusions have to be viewed with special care.

### Respondents' CI definitions

In a next step the respondents had to present their understanding of CI and were asked to give a definition of it. This question was important for the interviewer to be able to create a common frame of reference throughout the remaining conversation.

For comparison, the CI definition stated in section 2.1 which is used throughout this thesis is outlined again below:

"CI is a process as well as a product. As a process CI can be defined as the continuous, systematic, legal and ethical way in which a company scans its internal and external environment, and here especially the competitive aspects of the firm's environment, gathers and analyzes publicly available information and in a last step uses this processed information to aid operative and strategic decision-making. When thinking of CI as a product, CI can be defined as the final outcome of the whole CI process and therefore CI is also the informed foundation which supports managers in their decision-making."

<sup>&</sup>lt;sup>11</sup> Note: The exact terms and German equivalents used in Austrian companies for describing CI practices will be further analyzed later in this section.

In	Table	4	all	the	key	words	that	were	integrated	in	the	respondents	CI
definitio	ns are h	nighl	ligh	ted a	and g	rouped	toget	her int	o four diffe	ren	t gro	ups:	

Respondents' CI definition	<b>Total Number of</b> <b>companies</b> (respondents´ IDs)	Group name	<b>Total nominations</b> <b>per group</b> (from different respondents)	
gathering information about competitors	<b>6</b> (2, 7, 8, 10, 11, 12)	1.4	11 (0.1.65	
watch/monitor the competition	<b>3</b> (11, 12, 15)	data collection	<b>11</b> (9 different ones)	
market observation/monitoring	<b>2</b> (1, 14)		1	
process gathered information	1 (7)			
analyze gathered information	1(7)			
intelligent competitive comparison	1 (6)	data processing	7 (4 different ones)	
draw conclusions	<b>2</b> (7, 10)	uata processing	7 (4 different offes)	
intelligent way to deal with information	1 (3)			
track trends	<b>1</b> (10)			
direct competitive environment <b>1</b> (1)		turna of information	2 (2 different error)	
whole competitive environment	<b>1</b> (13)	type of information	<b>2</b> (2 different ones)	
no definition given	<b>3</b> (4, 5, 9)	no definition	3	

Table 4: Respondents' CI definitions

Nine out of the 15 respondents integrated an element into their definition of CI which had to do with data collection and market observation. The respondent from a telecommunication firm (company 2), for example, pointed out the importance of the data gathering stage during the CI process when saying "Für mich ist es sehr wichtig, und da liegt eigentlich auch der Akzent drauf, dass man relevante Informationen von Mitbewerbern sammelt." The first group of CI definition elements given by the respondents can be entitled "data gathering" and correlates perfectly with the part of the authors 'CI definition where the scanning of the internal and external environment and the gathering of publicly available information is pointed out.

The very important CI phase of analyzing and processing the gathered data was only integrated in the CI definition of four respondents. One of these four respondents was the representative of company 7 who highlighted the importance of the analysis phase several times throughout the interview, i.e. CI was described as "Informationsbeschaffung über Wettbewerber, zusammenführen eben der gesamten Informationen, sowohl extern als auch intern, eine strukturelle Aufarbeitung dieser Informationen, um das auch sinnvoll darzustellen (...) Analyse teilweise schon ableiten, vielleicht die Strategien der Wettbewerber analysieren, in welche Richtung gehen die, Reaktionsprofile erstellen sowohl für den Wettbewerber als auch für uns auf gewisse Aktionen des Anderen." Nevertheless, it was interesting to see that most of the interviewed CI practitioners concentrate their CI definition around the initial CI phase of data gathering and more or less neglect the equally important step of data processing.

Furthermore, two respondents described the type of collected information in their definition of CI. Three interviewees did not give any CI definition at all.

# Terminology used for CI activities in respective company

As has already been mentioned in the analyses of the respondents' familiarity with the CI term, the problem when analyzing CI in Austria is not the lack of CI activities in Austrian companies; the main problem is that such activities cannot be subsumed under "Competitive Intelligence" in Austrian firms. To shed a light on the terms used for CI practices in Austria, the respondents were asked to name the header under which CI activities run in their respective companies. Again, in order to bring a structure into the answers, the terms are grouped together in Table 5<sup>12</sup> according identified key-words used.

Terminology used for CI activities in respective company	<b>Respondents' IDs</b>
Competitive Intelligence	1, 13
Marketing Intelligence	2
Konkurrenzbeobachtung	4
Marktbeobachtung	4, 5, 8
Mitbewerbsbeobachtung	9, 14
Wettbewerbsbeobachtung	14
Konkurrenzanalyse	4, 5, 8
Marktanalyse	4, 8
Mitbewerbsanalyse	5
Wettbewerbsanalyse	11
Market Research	3
Marktforschung	15
Market Development	3
No special terminology used	6, 7, 10, 12

Table 5: Terminology used for CI activities in respondents' companies

Not surprisingly, the English terms Competitive and Marketing Intelligence are only used by three of the participating companies. In this respect it has to be highlighted that company 1 and 2 belong to the telecommunications industry and company 13 to the pharmaceutical industry, which are both very competitive and have a long CI history in other countries. It is generally more common to use German terms<sup>13</sup> for the Anglophone

<sup>&</sup>lt;sup>12</sup> See appendix C for an alternative matrix display of this table.

<sup>&</sup>lt;sup>13</sup> See Michaeli, 2004, p.2 for examples.

notion of CI. Five respondents used a term which contained the ending "-beobachtung". Terms such "Konkurrenzbeobachtung", "Mitbewerbsbeobachtung" as or "Wettbewerbsbeobachtung" again support the conclusions from the previous section that Austrian CI practitioners put more emphasis on the gathering of CI data and less on the analysis of the collected data. However, three from the respondents using the above mentioned "Beobachtung-terms" also stated that they use other terms such as "Konkurrenzanalyse" as well. In total, four interviewees named a term ending with "-analyse" as one of the terminologies used to describe CI in their company. Another two participants mentioned that their CI practices take place under the umbrella term "Market Research" and the German equivalent "Marktforschung", respectively, and that no precise distinction between market research and CI is made. The reason for this might be that a lot of CI work in Austrian companies is carried out by the companies internal market research departments<sup>14</sup>. In one company some of the work that can be related to CI is done in the context of the companies' market development ambitions and therefore the term "Market Development" is also sometimes used in relation to CI activities. Some of the respondents were not able to name a term which is used to describe the CI activities of their companies.

The analysis of RQ 1c shows that CI is a relatively new company practice in Austria and especially the English term CI is still rather unknown among Austrian competition analysts.

# 5.2 Organizational factors

As a lot of the existing literature on CI shows, these activities in a company may be organized in a variety of different ways. Therefore, it was important to explore the ways in which Austrian companies conduct their CI practices. Questions on the position of the person responsible for CI, the department in charge with CI work, and the resources in terms of employees and budgets available for CI tasks were hence integrated in the interview guide. The following analysis of the answers to those questions shows how CI is organized in Austrian companies and leads to a better understanding of the CI setup in Austrian organizations.

<sup>&</sup>lt;sup>14</sup> Note: A detailed description of this phenomenon, namely market research departments conducting CI, will be given in the next section on the organizational CI setup.

### Position of the person responsible for CI

When reading articles on CI practices in the USA or the UK one gets the impression that CI work is a vital practice in each and every organization and that therefore CI duties are always carried out by fully dedicated employees. This might be the case for several big American corporations with a long history of CI but this is certainly not the case in Austria where CI is still a rather unknown company practice.

The following evaluation of the question on the position of the CI responsible employee in the surveyed companies shows the current reality. In order to find a structure within the diverse answers to this question, some major summarizing categories were formed. It was decided to form four different main categories by grouping together similar job positions as stated by the respondents. The first group of job positions can be directly linked to CI and strongly related topics such as competition analysis. The second and at the same time the largest group can be named "Market Research", as all of the mentioned job positions fall in this area. The remaining summary categories are "Marketing" and "Product Management". Additionally, during one interview no specific answer was given to this question.

Position of the person responsible for CI	Respondents' IDs	Group name	Total per summarizin g category
Competitive Intelligence manager	1		
Marketing Intelligence manager	2	Position directly related to CI	3
Market and competition analyst	5		
Director market research	3 (& business monitoring), 4		
Member of the market research department	7		
Market and trend research manager	11	Market Research	7
Market research, process- and data management	8		
Marketing research	14		
Corporate communications and market research	15		
Marketing manager	6, 10	Montrating	3
Project manager marketing	13	Marketing	3
Senior product manager	9	Product Management	1
No answer	12	No answer	1

Table 6: Position of the person responsible for CI in the respondents' company

As already brought forward in chapter 5.1, the two companies from the telecommunications sector are, besides one pharmaceutical company (company 13), the

only ones which already use terms such as Competitive and/or Marketing Intelligence, in this case by integrating these terms in the job title of the person responsible for CI. The highly competitive external environment may have led to the decision to create such a position. Surprisingly, despite the results from the question on the respondents´ familiarity with CI, one of the respondents working for an energy supplier held a position named "market and competition analyst". However, in the course of the interview it turned out that this person mainly focuses on market research and less on CI work.

The majority of the respondents declared that the position of the person responsible for CI in their company is denominated as "director of market research", "market and trend research manager" or something similar. This finding shows that there is a lack of dedicated CI personnel within major Austrian companies (which will be further confirmed in the following subsections). CI work in Austrian organizations is often supervised by market research staff and managers because CI is seen more as a by-product of market research than as an independent function of its own. Certainly, this organizational setting is harming the full evolution of CI's potential as only the most fundamental and basic CI practices can be carried out.

The next group of replies to this question mentioned the marketing manager or a member of the marketing team as the CI practitioner within their firm. However, it has to be added that in contrast to the two companies mentioning their marketing manager as the CI person within their firm, where CI is done in a similar negligible way as it is done in the previous cases with someone from the market research department as the CI responsible, the pharmaceutical enterprise (company 13) naming a marketing project manager as the dedicated CI employee pursues their CI projects in a more sophisticated way. The mentioned marketing project manager of this company is fully dedicated to market research with a special focus on CI and is operating on an international level.

Finally, in another company a senior product manager is put in charge of some CI responsibilities.

The first insights on the organizational circumstances of CI in Austria show that the importance of monitoring and analyzing the competitors is still quite neglected within the companies of this country. However, even in more CI-affine countries such as the UK, it is not the norm to install job positions that directly symbolize the CI function in their job title – e.g. Wright et al. (1999) explain that in most UK firms the CI

role is subsumed with the role of an analyst or planner, with less than a third of the CI responsible employees holding a job title including the words "competitor", "competitive" or "intelligence". Firms who do employ an officially named CI practitioner also tend to have a dedicated CI unit.

# Departments responsible for CI

Deeply interconnected with the previous question is the attempt to find out which departments are mainly involved in the CI process of the surveyed companies. A summary of the answers given to this question is shown in Table 7.

Department responsible for CI	<b>Respondents' IDs</b>	Total per summarizing category
Marketing/Market Intelligence	1	5
Marketing	2, 10, 11, 14	5
Marketing/Market Research	7	
Market Research	8	
Market Research (own staff unit, directly under general director)	4, 15	5
Market Research & Market Development	3	
Marketing - Sales	6, 13	
Marketing and Distribution Services/ Team Strategy and Planning	5	3
Product Management	9	1
No Answer	12	1

Table 7: Departments responsible for CI

The table illustrates similar results as Table 6. Only one telecommunication company maintains a marketing intelligence sub-department within the marketing department on a national level. This company has also installed a staff unit called "Market Intelligence", consisting of market research & reporting, market analysis & trend analysis and international competitive analysis, on an international level. This shows again that CI is done in a very sophisticated way within company 1. In contrast to company 1, the majority of the researched companies placed their CI responsibilities either within the marketing or within the market research departments. This situation perfectly reflects the CI organizations in German companies about which Michaeli

(2004) states: "Usually the competitive intelligence function is organized within marketing or market research departments." (Michaeli, 2004, p.2). A study on CI practices in Canadian technology firms carried out by Calof and Breakspear (1999) yielded similar results – "Only 2.7 per cent had a formal intelligence unit. (...) In examining where the intelligence function lay, 50 per cent said that it resided within marketing (...)" (Wright and Calof, 2006, p.456).

Nevertheless, these findings are totally different from the findings of similar studies conducted in the USA and UK, where the majority of all in-house CI activities are conducted by a centralized unit<sup>15</sup> or at least a fully dedicated CI practitioner or team. In a pan-European study looking at large-companies Badr (2003) found that 23 per cent of the investigated firms had a separate CI department.

Among the surveyed Austrian companies the reason for such an informal CI approach are manifold. In the case of company 4, for instance, the director of market research replied to the question about the reasons for not having a dedicated CI person and/or department that CI is being done by the market research department because their whole research is always carried out with the competition under consideration. In most of the cases the market research department is an in-house service provider that additionally offers competitor monitoring and analyses.

Another interesting finding was that the respondents were able to identify one department in their company that is mainly responsible for the companies' CI activities, however in several cases other departments than the first mentioned carry out some additional CI tasks, in some instances independently. The marketing manager of company 10, for example, mentioned that in large parts, CI is overseen by the marketing department, though the monitoring of competitors' key performance indicators and financial statements is done by the controlling department. A similar setting can be viewed in company 11, where the main CI tasks are carried out by the market research department, noting that "Es gibt aber auch verschiedene andere Stellen die sich die Mitbewerber ansehen. Wenn es zum Beispiel um die Produkte geht, also das ist eher der technische Bereich (...), das macht das Produktmanagement (...). Die Finanzleute haben, soviel ich weiß, auch Einblick, die haben die Bilanzen aufliegen von den Mitbewerbern". In another case, namely at company 15, the operative part of CI is done

<sup>&</sup>lt;sup>15</sup> Note: E.g. Wright and Calof (2006) mention two respective studies: A study in the USA conducted by the Global Intelligence Alliance (2005) showed, for example, that 71% of such activities were conducted by a centralized unit, and Wright and Pickton (1998) found that 65% of the surveyed UK firms had installed an intelligence unit.

by the market research department of the company with the help of the product management department; however the bigger analyses, such as case-scenarios, are done by the company holding.

The analysis on the departments responsible for CI as well as the findings regarding the position of the person responsible for CI show that CI in Austrian companies is set up in a huge variety of ways. However, besides a few exceptions, CI is not at all among the company practices which are specifically focused on within Austrian firms, otherwise dedicated personnel and/or departments would be put in place as it can be seen in North American companies. It has to be mentioned that also in the USA it took some time for CI to develop and to grow in acceptance. Almost three decades ago Porter (1980) observed that many firms did not gather competitor information in a systematic way but rather acted on the basis of informal impressions and intuition and the British author James Gulliford stated ten years ago: "Few organizations have any formal system for competitor intelligence." (Gulliford, 1998, p.22). These examples show that CI needs some time for living up to its full potential, and as CI is perceived as a relatively new company practice in Austria, it may still take a while in order to be fully accepted.

### Number of employees directly involved in CI

When addressing the organizational factors of CI, an attempt was made to not only generate findings on the organizational CI structures within the surveyed companies but also to investigate the resources in terms of manpower and budget that are invested in CI and CI-related activities. Table 8 displays the respondents' answers on human resources dedicated to CI.

Unsurprisingly, in accordance with the findings of the above mentioned organizational aspects of CI, it was furthermore revealed that there is a lack of fully dedicated CI employees within the interviewed companies.

Number of employees involved in CI	Respondents´ IDs	Total per summarizing category
1 <sup>1</sup> / <sub>2</sub> persons	1	1
1 person per product group (not fully dedicated to CI; main work market research)	13	
2 persons (not fully dedicate to CI; main work market research)	11	
1 (not fully dedicated to CI; main work market research)	2, 7, 14	8
1 (not fully dedicated to CI; main work marketing)	6	Ū
1 person (not fully dedicated to CI; main work process & data management + market research)	8	
1 person part-time (not fully dedicated to CI; main work market research)	5	
2 1/2 persons (only dedicated very rudimentary to CI)	9	
2 persons (only dedicated very rudimentary to CI)	12	3
1 person (only dedicated very rudimentary to CI; main work corporate communications + market research)	15	5
no dedicated CI person (tasks shared among the team members)	3, 4, 10	3

Table 8: Number of employees involved in CI

Only one company employs at least one fully dedicated CI practitioner. In eight other companies, employees who have got other main duties than CI are also responsible for carrying out the most important CI activities. For the majority of these persons, classical market research represents the main task of their job. In three companies a CI employee can be identified; however, those persons are only marginally dedicated to CI. The CI practitioner from company 15, who is responsible for corporate communications as well as market research, stated that "Pressearbeit nimmt mehr Zeit in Anspruch. Die Aufteilung ist zirka 70% PR und 30% Marktforschung und von den 30% Marktforschung, fließen nur zirka. 5% in CI, das läuft also so nebenbei". In the case of the three companies that are listed under "no dedicated CI person at all", this does not mean that nobody is responsible for CI within those companies. It rather indicates that the respondents from those companies were not able to identify any persons specifically responsible for such duties. When discussing this issue in detail, the interviewees explained that a particular department carried the main responsibility for CI, but that within the department no single person was charged with specific CI duties. The director of market research and business monitoring of an airline (company 3) further reasoned why there was no dedicated CI person in his department: "(...) das machen wir sehr überlappend und sehr vernetzt, weil nur das aus meiner Sicht auch funktioniert. Es ist wesentlich besser, als wenn ich einen dedicated Mitarbeiter habe, der sich nur um dieses eine Segment kümmert und dort halt der große Meister ist und ein anderer kümmert sich um eine andere Baustelle."

When taking a quick look at Table 8, one can easily draw the conclusion that it is hard for CI to gain in significance in Austrian companies if the needed human resources are missing. However, it is clear that CI, as a relatively new company practice, needs some time to be fully established within Austrian companies. The results from Austria are furthermore in line with examples from other countries with a similar CI development stage. So did for example a study carried out by Calof and Breakspear (1999) in Canada show that "70.3 per cent reported that they conducted intelligence on a part-time basis with employees being responsible for their own intelligence" (Wright and Calof, 2006, p.456). In a more recent pan-European study conducted by Badr (2003) "(...) a variety of intelligence structures was observed, with 26 per cent indicating a small number of CI practitioners and 18 per cent one full-time person" (Wright and Calof, 2006, p.459).

## CI budget

Due to the sensibility of this topic and in order to not affect any already established relationship with the respondents, it was decided to not directly ask about the amount of budget dedicated to CI. Nevertheless, another important question was raised, namely whether there exists an independent CI budget at all. In Table 9 the answers to this question are listed.

CI budget	<b>Respondents' IDs</b>	Total per summarizing category
Separate CI budget	1	2
Separate Marketing Intelligence budget	2	2
Market Research budget	5, 7, 13, 14	4
Within other, not specified budget	12	1
No Info	3, 4, 6, 8, 9, 10, 11, 15	8

#### **Table 9: CI budget organization**

Once more, the telecommunication companies hold a pioneer position among the surveyed companies, as these two companies were the only ones who talked about the existence of a specific CI respectively marketing intelligence budget within their companies. The CI manager of a telecommunication firm (company 1) explained "Ich habe ein bestimmtes Budget, das ich im Jahr verbrauchen darf. (...) Es gibt ein CI

Budget, definitiv. Wir arbeiten ja auch mit vielen Firmen zusammen die uns für CI Daten bereitstellen, das sind z.B. Firmen die Direct Mailings durchführen (...) und diese Dienste bezahlen wir natürlich, das ist ein ganz schöner Brocken." In the case of company 2 the respondent mentioned, regarding their marketing intelligence budget, that "Das (marketing intelligence budget) ist ganz selbstständig (...)" and further explained that it is part of the marketing budget.

Several respondents (company 5, 7, 13, 14) argued that funds needed for CI activities are taken out of the market research budget as CI is seen as the part of market research that deals with competitors. This goes along with the above findings on the integration of CI within the surveyed companies. For example, when talking about the CI budget topic, the marketing project manager of a pharmaceutical company reported "das Marktforschungsbudget ist immer im Rahmen des Marketingbudgets für ein Produkt drinnen. Es gibt bei uns kein CI Budget. So etwas gibt es nicht." (company 13). According to her, the respective product manager decides how much is spent on market research and then on CI. Similarly, the respondent from an insurance company (company 14) mentioned that their CI budget is part of the market research budget, whereas a pharmaceutical corporation (company 12) indicated that the qualitative part of CI is not budgeted at all and the quantitative part in terms of license fees and manpower falls within a non-specified budget. As an explanation for having eight companies falling into the "no info" category, it must be added that in those cases the interviewer did not have any chance to ask the respective question, mainly due to time limitations. Only one company mentioned the level of the yearly CI respectively market research budget unprompted. However, it was decided to not publish this sum due to missing references and lack of comparison.

All in all, this chapter on organizational factors indicates that CI in Austria is still rather underdeveloped in comparison to other countries with a longer CI history. More specifically, CI in Austria is often done by the market research departments and only a few companies employ dedicated CI staff. The CI responsibility lies therefore mainly in the hands of a market research or marketing manager. This unfocused CI approach of Austrian organizations is confirmed when looking at the CI budget management. Corresponding to the organization setup in many companies, there is no dedicated CI budget reserved; however in many cases, the market research budget is used for CI activities. Rarely, an independent CI budget exists. Two companies stemming from the telecommunications sector showed an above-average sophistication of their CI activities. Especially, company 1 can be seen as a leader of CI in Austria. This finding suggests that the industry type and the intensity of competition within a certain industry and less organizational factors such as the company size are the triggers behind differing CI approaches. Furthermore, the existing literature (e.g. Kokubo, 1992) often highlights the pharmaceutical and telecommunication industries as very CI sophisticated. In the Austrian sample this was only partially the case. Company 13 showed a much focused CI organization in contrast to company 12. This might occur because company 13 carries out European market research and CI activities for several products, whereas company 12 is an Austrian subsidiary of an international pharmaceutical group and therefore their pan-regional CI activities are conducted in the European and international headquarters. Additionally, no major differences in the CI organization of companies from different industries were detected. Such differences might occur in the future when CI will further grow in popularity and become an important company practice.

# **5.3 Data collection issues**

This chapter will provide more detailed insights into how CI is conducted in Austria with regard to the data gathering phase. It therefore helps to answer RQ 3a, RQ 3b and RQ 3c. The first section of this chapter explores the types of collected information whereas the second part looks into the sources used for gathering CI relevant information. The data collection phase is a very important part of the whole CI process because it vastly influences the rest of it. Due to the existing information overload in today's media influenced societies, the careful selection of the data sources and the restriction of the required data are more important than ever before. In a recent Financial Times article, Malcolm Gladwell, a researcher in the latest developments of neuroscience and psychology talks about this issue and specifies that "(...) we cannot cope with information overload - apparently, we are not designed to analyze large amounts of data and draw irrefutable conclusions."(Bell, 2007, p.2). He is further quoted with his explanation that it is important to carefully look on how much information is made available, because when faced with too much information the decision-making might even freeze (Bell, 2007). Certainly, this is not only a problem of individuals but of whole organizations as well. If an organization's ability to manage information gets overwhelmed by the vast amount of available information, much less people within the respective company will make use of it (Weier, 2007).

The positive aspect of today's information availability is that the majority of the needed information can be accessed easily, often without any costs involved. However, sometimes it becomes a real struggle and gets time-consuming to find the needed information.

# Type of collected information

As already mentioned above, the decision about what kind of data a company is going to collect for CI purposes is a hard and at the same time important one. The respondents of this study were asked to identify the information they collect in the context of their companies' CI process. For the purpose of a clearer understanding, the huge variety of answers was grouped in major categories such as "products & services" or "market figures" and the bundled results can be viewed in Table  $10^{16}$ .

Type of collected information (summary categories)	Respondents' IDs
products & services	1, 2, 3, 6, 7, 9, 10, 11, 12, 13, 14, 15
prices & conditions	3, 4, 5, 6, 8, 9, 10, 14, 15
financial data	1, 2, 3, 5, 7, 8, 10, 11, 13
sales figures	6, 8, 11, 12, 15
market figures	4, 5, 8, 9, 10, 14, 15
marketing	1, 4, 5, 6, 8, 9, 12, 14
positioning	2, 4, 7, 10
public relations	4
distribution & sales	8, 9, 10, 14
alliances, mergers & co-operations	8, 11, 13
strategies	7, 13
developments & opportunities	1, 7, 11
trends	2, 10
strengths & weaknesses	7
contracts	9
internal processes	1
supply side	8
competitive landscape	8
whole environment	2

Table 10: Type of collected information

<sup>&</sup>lt;sup>16</sup> See Appendix D for the detailed results.

Almost all of the respondents named the products and services of the competitors as an important research object. The collected information on competitors' products and services can be very variable, e.g. data regarding the overall product portfolio, detailed product information, side offers, product treatments, products in the pipeline (see also Kokubo, 1992), internet services, etc. is gathered. Among the three companies that did not explicitly mention the competitors' products and services in this context were two energy suppliers (company 5 and 8). This seems straightforward as their market is rather price- than product-driven. Nevertheless, for such an industry, the services side should be of a major interest. In general, it is understandable that the competitors' products and services are the main focus for the majority of the researched companies because this is a company's most important property and this is where in most cases a unique selling proposition stems from. Furthermore, new trends can often be identified by the products of an industry and a company might directly derive the strengths and weaknesses of the competition as well as their own from the different product portfolios.

Another important topic for most of the surveyed companies was the collection of data on the competitors' prices and conditions. This was especially the case for companies operating in price- and condition-driven industries, such as airlines (company 3), banks (companies 4 and 10), energy suppliers (companies 5, 8 and 9) and insurances (companies 14 and 15). The two insurance companies, for example, have a special focus on the premium developments within their market. Surprisingly, the respondents from the telecommunication companies, with their price intensive type of competition, did not stress prices and conditions as their main focus when collecting CI data. Nevertheless, it can be assumed that these two companies monitor the competitors' prices as well.

All companies – regardless of industry type and size – collect either financial data or sales/market figures about their competitors. Closely linked to such data is often the topic of benchmarking, which is very important for most of the respondents, as for example company 2 put it: "Ganz wichtig ist auch, Informationen zu sammeln, die ich benchmarken kann, das heißt, dass ich mich eben auch vergleichen kann. Mein eigenes Unternehmen vergleichen kann, schauen wo bin ich positioniert im gesamten Wettbewerbsumfeld." The director of market research of a bank (company 4) stressed that nearly all market research studies (e.g. standard market evaluation, customer share, brand image, advertising research, press watch, conditions analysis, positioning

analysis, etc.) are also done regarding the competitors because such studies make only sense if you can put the results in relation to your fiercest competitors.

All data regarding the competitors' marketing activities, positioning and PR work, such as communication strategies, promotion folders, advertising budgets or press watch are another focus for more than half of the surveyed firms. One Austrian sportswear company (company 6) has selected several main competitors and tries to analyze how the chosen rivals act on the market, e.g. what kind of advertising strategy do they conduct or if they engage in strategic retail co-operations.

Especially the energy suppliers (company 8 and 9) look additionally at the distribution and sales tactics of their competitors. In this respect, company 9 put the above-mentioned pure price focus within its industry into perspective: "Und es ist ja auch nicht der Preis alleine, worauf man schauen muss bei uns, sondern es sind auch vor allem die Kampagnen, die gemacht werden, die Vertriebswege, die besetzt sind und die Vertriebsmaßnahmen, die getroffen werden, weil die einfach diesen Preis transportieren. Und das sind auch die Kriterien, auf die wir in diesem Zusammenhang sehr achten müssen."

All the above-mentioned CI data collection categories are rather of a tactical nature. Nevertheless, the more strategic business side of their competitors with issues such as alliances, mergers and co-operations, general company strategies, developments and opportunities is also seen as very important for at least a third of the respondents when collecting CI data. The representative of a pharmaceutical company (company 13) explained that their focus always lies on a specific competitor and that they try to gather data regarding "die Strategie, die die Konkurrenten verfolgen, wo sie mit ihrem R&D hinwollen und wie sie das Produkt weiterentwickeln (...)". Due to the importance of a differentiation between strategic and tactical CI, the following chapter will partly concentrate on the respondents ´ attitudes towards both aspects of CI.<sup>17</sup>

Some respondents also added further types of collected CI data like internal processes, the supply side or competitors' contracts for checking their legitimacy.

To highlight the great variety of collected CI data under strategic as well as tactical aspects once more, a quotation from the CI manager of a telecommunication firm (company 1), in which it is incompletely listed what kind of data the firm collects regarding its competitors, is given "Angefangen vom operativen Reporting: Was haben die für Produkte, wie laufen die internen Prozesse ab, wie wird ihr Kunde behandelt,

<sup>&</sup>lt;sup>17</sup> See chapter 2.2 for a theoretical briefing on the differentiation between strategic and tactical CI.

wie schaut das CRM aus, wie wirkt das auf den Kunden, die ganzen Kundeninteraktionsprozesse; bis dann hin zur strategischen Betrachtung, d.h. Kennzahlenanalyse: Wie kann sich das Unternehmen weiterentwickeln, was hat es für Chancen; und Strategien erarbeiten, wenn z.B. jetzt Unternehmen XY zu Verkauf steht: Wer wären die Käufer, wer hat genug Geld, wem würde es etwas bringen? Was passiert, wenn Unternehmen XY Unternehmen YZ gekauft hat und integriert? Wird dann die Marke weiter bestehen?"

Summarizing this section, it can be concluded that the prices and products of the closest competitors are the most interesting information to collect for Austrian CI practitioners. Additionally, it was shown that a wide variety of information is gathered by the respondents for the purpose of CI.

# CI information sources

Closely linked to the type of collected CI data is another interesting issue, namely the variety of used sources for collecting relevant CI data. The reliability and timeliness of the collected data depends greatly on the type of the information sources used for collecting the data. As pointed out by Lamont (2007): "In the world of competitive intelligence, time is a critical factor." (Lamont, 2007, p.15). Similarly, Stodder (2007, p.59) warns that "No information system is an island, and he who depends on outdated data loses market share. (...) up-to-date information is the lifeblood of business." In a Marketing News article titled "Why bad intelligence happens to good people", Fuld and Bilus (1997) try to give examples of the challenge to choose the right information sources and highlight the problems of poor-ground level data and of finding timely information.

For the purpose of this thesis, the respondents were questioned about the data sources they use for gathering CI relevant information. Around 50 different answers were given to this question. Again, in order to guarantee a clear overview and to ease further analysis, similar responses were grouped into summarizing categories.<sup>18</sup> Table 11 highlights the summarized results.

<sup>&</sup>lt;sup>18</sup> See Appendix E for more detailed results.

CI information sources (summarizing categories)	Respondents' IDs
internet	1, 2, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15
(prospective) employees	3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15
information provider	1, 2, 3, 5, 10, 11, 13, 14
press	1, 6, 7, 9, 11, 12, 15
official authorities & industry unions	1, 5, 10, 12, 13, 15
mystery calls/shopping	1, 9, 10, 14, 15
personal network	1, 10, 11, 12
annual reports	7, 9, 11
public events	1, 6, 13
customers	5, 6, 8

**Table 11: CI information sources** 

The internet and existing as well as prospective employees are by far the most important information sources for CI purposes within Austrian companies. The empirically observed popularity of the internet (see Graef, 1997; Teo, 2000; Wood, 2001) and of existing employees (see Mellow, 1989; Wright and Calof, 2006) as a CI source is consistent with extant studies. The internet summary category in this study consists of information collection possibilities on publicly available websites such as competitors' websites as well as newsgroups, newsletters and online databases with viewing restrictions.

The sales staff, other departments, general agents and job applicants are subsumed under the (prospective) employees umbrella. The existing literature on CI places a special emphasis on the value of this kind of information sources. Mellow (1989), for example, talks about the sales force as the most useful CI source and a study carried out by Wright and Calof (2006) revealed that "(...) 73 per cent of respondents regularly gained information about competitors (...) from their employees" (Wright and Calof, 2006, p.457). In an article focusing on knowledge sharing Fraser et al. (2000) investigate the willingness of employees to share their knowledge for CI purposes and they furthermore look at the positive and negative effects such knowledge sharing has on them.

The rather costly services offered by information providers were mentioned as one way of obtaining CI information more often than the mainly free of charge services offered by trade unions or similar organizations. The reason for this might be that it seems more convenient and less time consuming to purchase a customized package from an information provider than to obtain cost-free but standardized reports from an official authority. Regarding the acquired data from information providers the spectrum reaches from direct mailing subscription services (company 1), advertising data (company 5 and 14) and classic market research studies with CI implications (company 2, 3 and 10) to multi-client studies (company 14). Data from official authorities and industry bodies is also provided from a variety of institutions. Company 15, for instance, makes use of an online database provided by the "Versicherungsverband" where they can download CI relevant information such as market share data. The respondent from the energy supplying company 5 talked about the possibility to receive data that can be used during the CI process from the "Europäische Vereinigung von Energieversorgern".

According to some respondents, a lot of CI information can be gathered from looking at industry-specific press articles (company 1, 6, 7, 9, 11, 12 and 15) or from getting hold of the annual reports of the main competitors (company 7, 9 and 11).

Five of the researched companies conduct mystery calls (company 1 and 9) and/or mystery shopping (company 1, 10, 14 and 15) in order to get a first-hand view on the competitors' services and products. For a marketing manager of a bank (company 10) such a mystery shopping represents an important way to get an overview of the existing products" and conditions within the market. At his bank this procedure is standardized and "jeder neue Mitarbeiter, der im Vertrieb tätig ist, wird sofort als Mysteryshopper bei den anderen eingesetzt, um auch dort zu schauen, wie werden die Standards wirklich gelebt, was kann man noch an Verbesserungen herausziehen (...)" (company 10). In contrast to the previous example, an insurance company (company 14) works together with external agents and students to implement their mystery shopping efforts.

The respondent from a pharmaceutical company (company 12) identified his personal network of friends who are working for competitors as his favorite and most effective CI information source. He admitted that they talk openly about their companies, whereas he supplies them only with very basic and unimportant information. Such an approach seems controversial and does slightly collide with the CI practitioners' code of ethics that was put into place by the SCIP. The respondents from the companies 1, 10 and 11 also mentioned their informal networks as a vital source of information that they use for CI purposes.

Furthermore, public events such as press conferences (company 1), trade fairs (company 6) or congresses (company 13) are another possibility to have an eye on the competition and to generate relevant information.

However, one's company's and the competitors' customers are certainly the most meaningful information source regarding CI (see Mayers, 1993, p.30). With their help,

one might find out real-life and most certainly truthful information on how one's company and the competitors are really perceived. Additionally, it is a good possibility to find out what the competitors are really offering. This practice is especially popular among energy suppliers. Company 5 and 8 mentioned that they conduct surveys among switching customers to collect data on the competitors' products, prices, conditions and services. Additionally, the call centre of company 8 is a vital source of CI information. The CI practitioner from company 8 gave an example of the information that might be gathered through this special customer-interface source, namely "(...) wenn Kunden anrufen und sagen, sie haben jetzt eine Zuschrift erhalten von irgendeinem Konkurrenten." In the case of a sportswear manufacturer (company 6), the relevant customers that might communicate such information are their retailers and the information is gathered by the company's sales representatives, sales managers and general agents. The marketing manager of this company added that the most constructive talks with their customers happen on trade fairs.

The above described findings show that there exists a huge variety of information sources that can be used during the CI process. These sources can either be internal or external, personal or impersonal, formal or informal. However, it is not really important in which category the used sources fall, the most important thing is that they are trustworthy and reliable and that the information gathered is timely enough. Despite the fact that company 1 again showed the greatest sophistication in their CI efforts by using the biggest variety of CI sources, no significant differences regarding the type of collected information and the type and number of used CI sources caused by the industry type or any other company characteristic were observable.

# 5.4 The CI process in general

In this section, various questions regarding the CI process in Austrian companies will be looked at. In doing so, the RQ 4a, 4b, 4c, 4d and 4e will be analyzed. This chapter is furthermore divided into five main subsections. First, the different stages of the CI process that were regarded as most important by the respondents will be highlighted. Then, in a next step the existence of ad-hoc CI work vs. annual CI plans in Austrian companies will be further described. Afterwards, a short insight on the technical aids used for CI by Austrian CI practitioners will be given, while next, the

different ways of CI information dissemination and the most important CI information receiver within the respective companies will be identified. Additionally, it will be explained whether it is possible for CI practitioners to follow up on the results of their work and the respondents were asked to identify specific situations for which CI might be useful. Finally, the different broad types of CI use, namely strategic or tactical CI use, will be analyzed in an Austrian context. The decision to choose the above mentioned topics for this chapter stemmed from the literature review, where these aspects of the CI process appeared to be of a very important and valuable practical nature for every CI professional.

### Main stages of the CI process

For analyzing this part of the study, it was necessary to know which parts of the CI process seemed most important for the respondents. They were therefore indirectly asked about the stages which they consider to belong to the CI process. In the existing literature the importance of each individual stage during the CI process is often highlighted by the authors – e.g. Agarwal (2006) stated that "The key to competitive intelligence is the process of turning raw data into valuable information, turning that valuable information into strategy, and turning strategy into actionable items, thereby improving business performance and operations by maintaining an organizational advantage." (Agarwal, 2006, p.309). Certainly, every author has a slightly different opinion on which major stages form the CI process and how they should be called. However, almost all of them (e.g. Fletcher and Donaghy, 1993; Anonymous, 1997; Gulliford, 1998; Calof and Breakspear, 1999; Viviers et al., 2005; Wright and Calof, 2006) share the view that "data collection", "data processing and analysis", "communication of the findings" and "usage of the findings" definitely belong to this process. For example, Gulliford (1998) describes that "there are four stages in monitoring competitors: collecting the information, converting information into intelligence (collate and catalogue it, interpret and analyze it), communicating the intelligence and countering any adverse competitor actions." (Gulliford, 1998, p.21). Some authors (e.g. Fletcher and Donaghy, 1993; Anonymous, 1997; Calof and Breakspear, 1999; Viviers et al., 2005; Wright and Calof, 2006) also see "planning" or "identifying information needs" as the first and at the same time as an important stage of the CI process.

Table 12 shows how the CI process is perceived by the interviewees and based on their commonalities identifies the main CI stages for Austrian CI practitioners. The results in Table 12 are ranged according to the chronological timeline during the CI process and categorized in five summarizing groups.<sup>19</sup>

CI process stages (summarizing categories)	Respondents' IDs
information gathering	1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13, 14, 15
data processing	7,9
analysis	1, 2, 3, 4, 5, 6, 9, 10, 12, 13
reporting	1, 2, 3, 5, 7, 8, 10, 11, 12, 14
actions/counter tactics	3

Table 12: CI process stages

In line with the results of chapter 5.1 regarding the respondents' CI definitions, nearly all of the respondents immediately mentioned the act of information gathering as an important CI process stage. Most of the respondents simply mentioned information gathering or the collection of CI information. Some of the interviewees further specified their answer, as did for example the marketing intelligence manager of a telecommunication firm (company 2), who named the purchase of information, a banks marketing manager (company 10), who put forward the act of mystery shopping and a product manager from an energy supplier (company 9), who gave the following detailed answer about the data gathering process within his organization when he was asked about the most important CI process stages: "Der CI Prozess hat für mich grundsätzlich zwei Stoßrichtungen, da gibt es für mich zum einen die Marktforschung an sich, die versucht Informationen über den Mitbewerb von den Kunden oder aus dem Markt direkt zu bekommen. Wie wird der Mitbewerb im Markt wahrgenommen? Und das situativ. Und in zweiter Hinsicht (...) aus der kontinuierlichen Beobachtung und Sammlung und Konzentration von Informationen, die wir aus verschiedenen Kanälen im Unternehmen gewinnen und involviert darin sind eben insbesondere natürlich der Vertrieb, unser Call Center und (...) in unseren Außenstellen natürlich unsere Mitarbeiter, die vertrieblich tätig sind." Two respondents (company 6 and 7) mentioned another important part of any CI approach that is strongly related to and more or less a pre-step or the starting point of any data gathering activities, namely the selection and definition of the main competitors that are about to being monitored.

<sup>&</sup>lt;sup>19</sup> See Appendix F for a detailed list.

After the collection of the relevant information, in most cases it has to be processed before being analyzed. Only two respondents (company 7 and 9) mentioned this intermediary step. In the case of an energy supplier (company 9), a product manager spoke about the concentration of the gathered information, as can be seen in the previous quotation.

The next chronological stage during the CI process is the analysis phase. A lot of wrong conclusions could be drawn if a company does not invest enough time and resources in the analysis because the collected information in its pure form alone can rarely create a competitive advantage<sup>20</sup>. Despite the fact that a large part of the respondents did not include the analysis of the gathered data in their CI definition, two thirds of the interviewees mentioned the analysis or a specific analysis method as an important part of CI. The detection of new markets/possible destinations and analysis of competitors' actions and how they might react in specific situations was mentioned in the context of CI analysis by the director of market research and business monitoring of an airline (company 3). For the same purpose, namely to find out what the competitors are doing and how they might react, a bank (company 4) uses computer simulation as a possible analysis technique. The same company, as well as a telecommunication firm (company 2) and a pharmaceutical company, named the comparison with competitors and the use of benchmarking (company 12) as one way of analyzing the collected data. Generally, for the majority of the respondents who did not mention CI analysis as an important part of the whole CI process in an unprompted way, it does not mean that those companies use the collected CI unanalyzed. However, one respondent from a sporting goods manufacturer (company 11) stated that in their case CI is more like an observation and less an analysis "CI ist nicht eine wirkliche Analyse, sondern es ist eine Konkurrenzforschung, eine Datensammlung über Konkurrenz oder Mitbewerber." In an article published in the Industrial Distribution magazine such behavior is criticized and warned of, because "The major stumbling block seems to be that while information is being gathered, it's not being pulled together and ultimately, little or nothing is done with it." (Anonymous, 1996).

Some respondents also identified several actions that can be subsumed under "reporting" as an integral part of the CI process. The reporting and dissemination of CI

<sup>&</sup>lt;sup>20</sup> See Fuld and Bilus (1997) for a negative example.

findings is indeed an important task of a CI practitioner because without these practices, the whole analysis would be useless as the findings would never be utilized when making decisions. However, substantial differences across the companies interviewed were observed regarding the way of reporting and the reporting frequencies. The various ways of reporting used by Austrian CI practitioners will be described in more detail later on in this chapter when discussing the dissemination of CI findings, but in order to briefly highlight the spectrum of the given answers, a few examples are given right away. Some CI practitioners (e.g. company 11) feed databases to report their findings and the CI manager of a telecommunication firm (company 1) sends out short daily CI reports and an aggregated monthly newsletter version via e-mail, whereas several departments of an energy supplier (company 8) schedule a weekly jour-fixe for communicating and reporting the most recent CI findings. Moreover, the reporting frequency ranges from daily (company 1 and 7) to once a year in the case of the reporting of a competition summary done by an energy supplier (company 9).

Finally, one respondent sees the development of specific actions and counter tactics as a vital part of CI. The development of such actions or tactics might be integrated in the analysis phase or might be done by the decision makers and therefore happen after the CI findings have been reported to them.

Regarding the overall CI process and the relationship between information gathering, analysis and reporting, the CI manager of a telecommunication company (company 1) added that she is mainly involved in operative data collection work: "Es (CI process) läuft so ab, dass sehr viel operative Arbeit anfällt, das heißt, ich sammle jeden Tag Informationen aus den verschiedensten Quellen". Other respondents, such as the market and competition analyst of an energy supplier (company 5) and the market and trend research manager of a sporting goods firm (company 11), mentioned again in this context that most of the CI activities in their companies run along with market research and therefore it is not easy to identify the most important CI stages.

All in all it seemed a lot easier for most of the respondents to give details on the data gathering procedures and on the ways of reporting their findings than on the vital step in between: the analysis. An interesting statement in this respect came from the marketing manager of a sportswear company (company 6) who said that "Daten zu

sammeln und anzuhäufen ist ja nicht das Problem, das Problem ist, sie systematisch auszuwerten und dann zu verwenden und umzusetzen, was sinnvoll fürs eigene Unternehmen ist. Und das ist das Komplexe." This statement might be a hint why most of the interviewed CI practitioners prefer to talk about the data gathering phase rather than about subsequent stages of the CI process.

#### Ad-hoc CI requests vs. annual CI plans

Another interesting aspect of CI activities in companies is the question who takes the initiative for specific CI actions and tasks and whether the CI approach of a company follows the strict guidelines of an annual plan, i.e. if it is a well-rehearsed continuous approach or is mainly driven by ad-hoc requests. For the purpose of analyzing this question, the respondents' answers were grouped into three summary categories, namely "ad-hoc", "planned" and "continuously" and are illustrated in Table  $13^{21}$ .

Initiatives for CI activities	Respondents' IDs
ad-hoc	1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 14, 15
planned	2, 3, 4, 6, 8, 9, 10, 12, 13
continuously	1, 5, 6, 7, 13, 14

Table 13: Structural driving forces behind CI activities

While the existence of ad-hoc requests has been mentioned by nearly all of the respondents, annual CI plans and/or a continuous CI approach are the reality in about half of the surveyed companies. However, the frequency of ad-hoc requests differs within the sample, e.g. in one of the researched telecommunication companies (company 1) ad-hoc requests exist but are not a major focus, the same applies to a pharmaceutical firm (company 12) and an insurance company (company 15) where the respondents described such ad-hoc requests as occurring very rarely. In contrast, the respondent from an airline explained that "Aber das kommt natürlich sehr oft vor, dass man ad-hoc schnell eine Recherche anstellen muss zu jeglichem Thema" (company 3).

Regarding the CI activities planned in advance, the CI practitioner of a pharmaceutical company (company 13) stated that besides the information requests that occur ad-hoc, e.g. through rumors, at least a theoretical annual plan exists. The

<sup>&</sup>lt;sup>21</sup> See Appendix G for a detailed list of the structural driving forces behind the CI activities.

marketing manager of a bank (company 10) explained that normally the yearly CI plan is created during the yearly marketing planning process. In a pharmaceutical company (company 12) there exists a standardized CI reporting plan corresponding to the monthly headquarter report deadlines, whereas in a sportswear company (company 6) CI data is collected continuously and the annual CI plan envisages that the collected data gets analyzed four times a year.

Under continuous CI activities, practices such as the permanent monitoring of the daily business (company 1, 13 and 14) and a regular, not standardized price watch (company 5) can be subsumed. Moreover, a sportswear manufacturer (company 6) and an automotive company (company 7) reported that they continuously collect data on their competitors. The corporate strategy and planning manager of the automotive company added that the internal company profiles of their main competitors should always be up-to-date. The market and trend research manager of a sporting goods firm (company 11) attempts to feed the company CI database regularly and therefore has implemented a continuous CI approach in terms of data gathering. However, their CI analyses are mainly done on special occasions and therefore have more of an ad-hoc nature. Due to the CI manpower limitations of company 15, an insurance company, and the rather static market environment in terms of new product launches and/or changes, the person responsible for CI in this firm conducts CI product observations only very occasionally.

As can be easily concluded, the different types of CI setups in the surveyed companies and especially the way how CI is integrated in the respective company lead to very different CI approaches. For example, the very professional CI setup and the continuous CI approach in terms of data gathering, analyses and especially reporting of company 1 has the effect that ad-hoc requests from other departments are kept to a minimum, whereas in company 10, where CI is running along with market research and the CI approach is rather unstructured, the marketing manager stated that the proportioning between ad-hoc, on demand CI work and planned CI activities looks like as follows: "70% Auftragsarbeit, 30% Eigeninteresse. Die 30% (...) kommen fast nur aus dem Aspekt der jährlichen Marketingplanung und der jährlichen Detailanalyse des Marktes zustande."

### Technical aids used for CI purposes

Several software providers are nowadays supplying special CI software. Such software should, for example, ease the data gathering process, simplify data mining and analysis procedures and help with a systematic CI information storage system. However, the responses to the question whether the surveyed firms use technical aids for simplifying the CI process yielded a clear result. Besides some companies using databases (e.g. company 1 and 11) for information storage and dissemination purposes, no special CI software or other technical devices are currently in use. Additionally, only the intranet (e.g. company 1) was used to assist during the CI process.

Sometimes this lack of sophisticated technical aids that can support the CI activities of a company might even create problems. For example, the marketing manager of a sportswear company (company 6) was not satisfied at all with the current IT situation with regard to CI and even reported problems with the systematic documentation of CI information: "Ein Thema, das uns irrsinnige Schwierigkeiten macht, ist all diese Dinge übersichtlich in einer Datenbank zu dokumentieren. Das wäre überhaupt unser Wunsch, das haben wir noch nicht. Außer, was sich irgendwo in irgendwelchen Tabellen ein bisschen auflisten lässt, das ist bei Preisgeschichten noch am einfachsten. Es ist ein Ziel (...), dass wir in diesem Bereich weiterkommen, da dies immer das größte Problem ist (...)." However, he mentioned that the whole company software will be updated in the near future and that this should also help to solve the documentation problems.

Another example for an imminent improvement of the IT situation is a company from the automotive industry (company 7). The respondent from this company mentioned that "Es gibt immer wieder einmal die Überlegung, so eine Software, auch in Richtung Knowledge Management, anzuschaffen (...)," however she put this immediately into perspective by adding "(...)aber diesen Stellenwert hat das (...) noch nicht. Also da wird einfach einmal gesammelt und so aufbereitet, also ohne technische Hilfsmittel."

To support the CI process with the help of the right software or other technical devices is an important step in the right direction of further establishing CI in Austria.

# Dissemination of CI findings<sup>22</sup>

The pure collection of CI data and the analysis of the same do not necessarily create a competitive advantage. As long as the generated CI findings are not utilized by decision makers, they do not make a difference. Only in a case where the CI practitioner himself makes use of his findings, an intermediate step between the generation of CI findings and the companies' decision makers is not necessary. In all the other cases, the CI findings have to be distributed to the relevant parties within the company and even if the CI practitioner uses the CI findings himself, other people within the company should receive such relevant information as well. Therefore, the question on how the sampled Austrian CI practitioners disseminate their findings was asked. This question is especially interesting due to the fast changing possibilities in information and communication technologies in today's technology-driven world. Remarkable innovations in information and telecommunication technologies happened during the last few decades and theoretically enable each human to communicate and disseminate information in a variety of ways. Certainly, the same applies for the communication of CI findings. The immediate and fast communication of CI findings is vital in today's fast-moving economies in order to not risk using out-dated information for drawing conclusions and making decisions. In Table 14 the results of the qualitative study, regarding the ways of disseminating CI findings, are presented.

CI dissemination ways	Respondents' IDs
E-Mail	1, 2, 5, 6, 8, 9, 10, 12, 13, 14, 15
Newsletter	1, 2, 4, 5, 8, 11, 14
Intranet	1, 3, 9, 10, 13, 14, 15
SMS	1
Presentations/meetings	2, 4, 5, 8, 10, 12, 13, 14

Table 14: Ways of disseminating CI findings

A quick look on the table shows that for communicating such findings, the respondents mainly use modern information and communication technologies, which are probably the fastest, easiest and most comfortable way of CI dissemination and therefore seem the logical solution.

<sup>&</sup>lt;sup>22</sup> See Marin and Poulter (2004) for an extensive study on the dissemination of CI, including a literature study, a web-based quantitative survey with follow-up qualitative e-mail interviews. This paper also researches the topic of "CI information receivers" that will be looked at later on in this chapter.

Not surprisingly, the communication of CI findings via e-mail enjoys by far the greatest popularity. As a newsletter is usually sent in the form of an e-mail as well, this tendency becomes even more prominent. However, the ways in which e-mails are used to disseminate CI findings can vary enormously. The CI manager of a telecommunication firm (company 1) uses e-mails for sending out the daily CI reports to the adequate persons in her company. The sophisticated way in which CI is conducted in company 1 can also be seen from the CI dissemination process within this company. In addition to the daily CI reports, the following methods of communicating the CI findings are in place there: "(...) es gibt auch noch eine aggregierte Version, einen monatlichen Newsletter. Und bei akuten Sachen, also wirklich tagesaktuellen Sachen gibt es auch Alerts per E-Mail und an Schlüsselpersonen, also z.B. an das Topmanagement auch per SMS. Aber die ganze Verteilung funktioniert über E-Mail und wir haben eine eigene Intranetplattform". This intranet platform is used to make historical CI data, additional analysis, and a variety of reports generally available.

In the existing CI literature the intranet is also described as a good way for communicating CI findings. For example, Laalo (1998) took a closer look at using the intranet for disseminating CI and stated that "By building and using intranets, firms of all sizes can leverage their collective knowledge in an effort to create sustainable competitive advantage." (Laalo, 1998, p.63).

In another telecommunication company (company 2), e-mails are used for sending entire reports to involved company-internal parties and for communicating study summaries to the board of directors. The so-called "Market News" newsletter is another way for the marketing intelligence manager of company 2 to distribute CI information. This monthly newsletter is filled with diverse CI information, e.g. an overview of what happened on the marketplace during the last month in terms of competitor actions, new products, publicized key figures (e.g. competitor sales figures), and so forth.

In the case of an energy supplier (company 5) the dissemination of CI findings always happens in written form, which means that e-mail communication is used to transmit reports to the market and competition analysts' team leader and the CEO. Moreover, a monthly, newsletter-like report is also distributed via e-mail.

The market research, process- and data management responsible from another energy supplier (company 8) always sends out the protocol of the department spanning jour-fixe via e-mail in order to keep all relevant positions updated. She also added that "Wenn zwischen drinnen einmal etwas passiert und das ist dringend, dann werden die E-Mails einfach rausgeschickt. (...) Es gibt einen bestimmten E-Mail-Verteiler, auf dem man alle drauf hat." Additionally, each month an e-mail newsletter, with a monthly CI summary and information on recent studies that are conducted, is sent to selected persons.

The CI practitioner of company 9, also an energy supplier, uses e-mail communication for important CI news and sometimes, if it is really urgent, the important news is spread via telephone. Like in a few other surveyed cases, the intranet of this company hosts a CI section. After verification, editing and analysis, CI information is made available on this internal platform. Within this section, the presented information is sorted by competitor. Besides this main section on CI, two other parts of the company's intranet host part of the CI findings. Regarding one of these sections, the interviewed product manager of company 9 described that "(...) es gibt einen Bereich, der, sagen wir, chronologisch geordnet ist und wo (...) im Sinne eines Newstickers, neueste Meldungen, die wir bekommen, reinlaufen (...)". In this part of the intranet, next to all general market news, the news regarding the competition are highlighted as well. The third part of the intranet that contains CI relevant information is the continuous price comparison feature that exists for each product and is presented within each product subsection.

Going back to the dissemination of CI findings via e-mail, another case that can be highlighted in this respect is the example of a pharmaceutical firm (company 12). In company 12, the internal CI findings are sent out to the relevant persons on a weekly basis and a report to the corporate headquarter is sent once a month.

Above, a few examples of spreading CI information via newsletters have already been given. Looking at the examples of a sporting goods manufacturer (company 11) and an insurance firm (company 14), CI information can also be packed in more general newsletters. In company 11, the monthly "Trendtelegramm" newsletter sometimes includes competitor information and in company 14, CI information is sometimes presented within the market & sales newsletter. The respondents of an automotive company (company 7) and of a bank (company 10) admitted that they used to have a CI newsletter but unfortunately it does not exist any more.

Concerning the use of the intranet for communication purposes with regard to CI, it can be observed that around half of the respondents mentioned it as a means for disseminating CI findings, however the level and type of usage varies widely between the respective companies. Some CI practitioners (e.g. company 3 and 13) who use the intranet to post CI findings have, for example, defined restricted users for certain parts of their CI intranet section. In company 9, an energy supplier, the yearly competitor overviews are only made available to a few persons due to its strategic content, whereas the rest of the intranet CI section is available to all users. The respondent from an energy supplier (company 8) as well as the respondent from an automotive company (company 7) told the interviewer that most of the CI information is only available on request. The CI responsible from company 8 further explained that "Ich habe es deswegen nicht im Intranet drinnen, weil es teilweise Studien sind, mit denen die anderen Mitarbeiter nichts anfangen können. Das bringt nichts." Similarly, in the case of a sporting goods company (company 11), the CI information is not made available through the intranet. However, there exists a CI database and a certain group (e.g. marketing team, board of directors) has access to this database. In order to give the database an instinctive structure, each bullet point is related to a competitor and the subsections are always built in the same order. The market research director of a bank (company 4) explained why the employees of his company need to request all the needed CI information and why he does not make CI available to all employees through the intranet: "Es gibt keine Intranet-Datenbank mit solchen Infos, da ich nicht möchte, dass alle Mitarbeiter auf alles zugreifen können, sondern nur auf Anfrage. Da ansonsten zum Beispiel ein Vertriebsmitarbeiter in Tirol, der selbsternannter Werbeexperte ist, auf Spots zugreifen könnte und Verbesserungsvorschläge machen möchte und es dann mühsam wird, mit allen zu diskutieren."

The level of intranet usage by CI practitioners varies not only in terms of permitted users but also in terms of the amount and kind of information that gets posted. Some CI practitioners (e.g. company 1 and 9) host a relatively comprehensive CI section, whereas others (e.g. company 14 and 15) keep the CI intranet section rather small and limited. One insurance company (company 14), for instance, has limited the CI information that is presented on the intranet solely to the field of advertising and communication of the competitors. In the other insurance company within the sample (company 15), only very important CI reports are made available through the intranet and they might also be published in the company magazine. According to the marketing manager of a sportswear company (company 6), the possibility exists that CI findings are also disseminated through an intranet in the near future, and he clarified that this

might happen in the course of the, already above mentioned, overall information system upgrade<sup>23</sup> in his firm.

Obviously, simply sharing the CI findings via intranet does not guarantee that the relevant decision makers click on the relevant files, as the marketing project manager of a pharmaceutical corporation (company 13) notes: "Es gibt eine Intranetseite mit entsprechender Information, aber es ist nicht immer so, dass die Leute auch direkt draufgehen. D.h. das alleine reicht nicht aus. Also, das ist eher vernachlässigbar." In this case, the CI section of the intranet is seen as an additional service for some users; however, it will always require a second way of CI dissemination and at the moment, e-mailing the findings is the method of choice.

Despite the increasing popularity of the above mentioned, i.e. technological ways of disseminating CI within a company, a lot of CI practitioners still prefer the personal communication and presentation of CI findings in certain situations. Some respondents present their CI findings in the course of regularly scheduled meetings with their superiors and/or other relevant persons. In company 8, this happens during a weekly jour-fixe in which representatives of all the relevant departments come together and give each other a short update. The marketing manager of a bank (company 10) is able to present his CI findings on a monthly basis during the meeting of the Board of Directors: "Es gibt einen monatlichen (...) Punkt auf der Agenda in der Vorstandssitzung diesbezüglich (...). Das heißt, dass sich dort immer zirka eine halbe Stunde Zeit genommen wird, um zu schauen, okay wie schaut derzeit der Markt aus, was verändert sich (...)". Additionally, the findings of competitor reports are presented and afterwards distributed via e-mail top down until the second management level is reached. Furthermore, as it happens for example in company 5 and company 13, if projects or studies are conducted with external partners, the results of these studies are initially presented to the relevant decision makers before the findings get distributed via e-mail. The positive aspect behind personal communication or presentation of the CI findings is that possibly occurring questions or misunderstandings can immediately be answered respectively clarified. Nevertheless, it represents an enormously timeconsuming process for a number of employees and should therefore only be used in really necessary cases.

<sup>&</sup>lt;sup>23</sup> See the subsection "Technical aids used for CI purposes" of chapter 5.4 for more details on this.

As the respondent from company 15 put into words when in detail answering this question and as the totality of the findings on the dissemination of CI shows, the way of distributing CI in Austrian companies certainly depends on the topic and its importance. I.e., in very urgent cases, SMS alerts might by used, while a monthly CI summary can be simply disseminated by sharing it on the intranet.

The findings of this qualitative study are largely in line with the findings of Marin and Poulter (2004), who identified e-mails as the most popular vehicle that is used for distributing CI in an organization. However, personal communication, e.g. during meetings and presentations, is not mentioned at all in their study.

In the future, newly rising information and communication technologies will again have a major impact on this topic and the impact will most certainly be a positive one.

### CI information receiver

Strongly connected with the last topic is the question of who receives the CI findings within an organization. In order to get an understanding of the CI process in Austrian companies as a whole, it is extremely important to look at all the interrelated stages and involved parties of the process and the CI information receivers are definitely an important part of the whole process. Therefore the respondents were asked to identify the CI information receivers. All the identified people are granted the possibility to use CI on their job. However, only receiving the CI findings does not automatically make the CI receiver a CI user. The interviewees were not only asked to identify the hierarchy level of CI information receivers, but also to name all the departments within their firm that are provided with CI findings. Therefore, Table 15 summarizes the findings on the hierarchy level of CI receivers, whereas Table 16 displays the mentioned CI information receiving departments.

Hierarchy level of CI information receivers	Respondents' IDs
CEO/general director	4, 5, 8, 12
upper management/Board of Directors	1, 2, 8, 9, 10, 11, 12, 15
middle management	1, 5, 8

Table 15: Hierarchy level of CI information receivers

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Partly confirming the results of Marin and Poulter (2004, p.171f.) who found that more than half of their respondents mentioned managers as the main receivers and main users of CI, Table 15 shows that persons on all management levels are seen as the main CI receivers. Especially, upper and top management were named most often by the respondents of the Austrian sample. An explanation for this might be that in most companies, CI practitioners are urged to distribute their findings to managers because CI is seen as particular useful and important for managers involved in all types of tactical and strategic decisions. Other employees might also receive CI information; however, this is often not seen as a priority and in many cases these employees have to gather the needed CI findings themselves by searching the intranet or requesting the needed information. It seems as if the respondents of the qualitative study only named the persons they directly feed with CI, may it be through e-mails or via other means of communication. Within the different hierarchy levels, a wide variety of positions might be included, e.g. in a telecommunications company all CI findings "gehen (...) an den Vorstand, an den Marketingvorstand bei uns im Speziellen" (company 2). For comparison, in a pharmaceutical firm (company 12) the monthly CI report is sent to the CEO, the three business unit heads and to the head of the finance department. In the case of an energy supplier, the market and competition analyst distributes summaries of the CI findings "an die Teamleiter und an den Geschäftsführer" (company 5). At another energy supplier (company 8), the respondent mentioned that in their case "die Geschäftsführer und die Produktmanager" receive the CI information in a written form and for the "Verkaufsbereichsleiter und Abteilungsleiter" there is a weekly meeting where CI findings are discussed. Company 8, therefore, is a good example of a company in which all hierarchy levels are supplied with the relevant CI information.

As already mentioned above, Table 16 summarizes the findings on the departments which receive CI information. As can be clearly viewed in Table 16, marketing and product management are the most mentioned departments regarding the reception of CI. In a telecommunications company (company 1), selected persons within several different departments are provided with CI. However, the CI manager of company 1 added that certainly the main focus lies on "Marketing, aber auch Business Development". The importance of the marketing departments in this respect goes along with the findings of Marin and Poulter (2004), who revealed that in about a third of the

surveyed companies the marketing department has access to or is regarded as the main user of CI.

Departments that receive CI information	Respondents' IDs
marketing	1, 4, 6, 11, 15
product manager/management	6, 8, 9, 13, 14
involved departments/initiator	1, 2, 4, 10
concerned persons	5
business development/strategic planning department	1, 7
sales department/ sales representatives	1, 6
R&D	13

Table 16: Departments that receive CI information within respective company

Additionally, in the empirical study conducted for this thesis, a third of the respondents, coming from a wide variety of industries, declared the product management departments respectively product managers as the CI receivers within their companies.

Another third of the interviewees did not name a specific department but stated that the initiators of a certain CI activity or the somehow differently involved departments or concerned persons receive the relevant CI information from the CI practitioners. In this context, the marketing manager of a bank (company 10) brought forward that the individual branches of his company receive the needed CI information. The director of market research of company 4 also mentioned that CI is disseminated to all the involved departments but he added that those involved parties are mainly marketing and communications.

The sales department respectively sales representatives were only named by two respondents as CI information receivers; this contrasts with the findings of Marin and Poulter (2004), with 39% of their sample identifying sales personnel as employees who receive CI information. In the eyes of the respondents of the study conducted by Marin and Poulter (2004), the sales staff is therefore the most dominant group among the CI receivers, right after the managers and before the marketing departments. The CI manager of a telecommunications firm further explained that it is especially important for sales people to receive CI findings, because "Vertrieb ist einer der Hauptansprechpartner, denn wenn unsere Außendienstmitarbeiter zum Kunden gehen, sollten sie schon wissen, was die Mitbewerber anbieten" (company 1). A similar reason was given by the marketing manager of a sportswear manufacturer "Der Außendienst, der muss sehr viel wissen, damit er im Gespräch gewappnet ist, um argumentieren zu Außendienstmitarbeiter können. Der ist aber nicht der. der die Wettbewerbsinformationen umsetzen und etwas daraus machen muss" (company 6). Actually, according to him, the sales representatives need such information in order to be able to argue when talking to customers, but the marketing and product management departments are the ones which need to profoundly integrate those findings into their daily tactical and strategic work.

When further comparing the results of this qualitative study and the findings of the quantitative survey on CI dissemination among SCIP members that was conducted by Marin and Poulter (2004), it becomes evident that the two studies are consistent regarding the distribution of CI findings to the research & development department. In Marin and Poulter's (2004) study only 10% of the respondents report their R&D department as having access to or mainly using competitive information. Similarly, in this study only one representative of a pharmaceutical corporation (company 13) identified the R&D department as an important CI receiver. Especially in research intensive industries, such as the pharmaceutical industry, it would be essential to collect competitive information on R&D and disseminate CI findings to one's own R&D department in order to gain a competitive advantage and assist long-term strategic planning.

#### Use of CI information

In this section, it is briefly looked into whether Austrian CI professionals are given the possibility to see the utilization of their findings and the final results of their work. Furthermore the respondents were asked to give examples of particular decisions that may be backed up by CI or of specific fields of use of CI.

The CI practitioners of a telecommunications company (company 1), of an energy supplier (company 5) and of a sporting goods firm (company 11) said that they are able to see the application and the final results of the information they have generated. For example, one CI manager stated: "Es ist schon sehr wohl so, dass man das mitkriegt, dass das verwendet wird" (company 1). She added that she often gives suggestions for a specific action and very often she is able to see the implementation of her suggestions a

while later. In some other companies (company 4, 5 and 15), the CI analysts also make suggestions for action and they are therefore able to directly follow up on whether their inputs get used or not. The CI responsible of an energy supplier (company 8) named two possibilities to view the utilization of CI but mentioned that this is not possible all the time. One of her possibilities is to follow up via direct feedback and the other method is only possible in a case where scenario plans get developed. In such a situation she is able to monitor the implementation of the scenario plan. At another energy supplier (company 9), the product manager, who is mainly responsible for CI, can observe the amount of CI users because the traffic on the CI intranet section is traceable. However, he is not able to view direct results of his CI work. When the marketing department of company 10, a bank, conducts CI work for one of their branch offices, they are always involved in the implementation of their findings as well.

In contrast to the already mentioned examples, two respondents (company 2 and 7) declared that it is especially hard for them to follow up on the implementation and effects of their findings. Overall, it has to be said that for most of the respondents it is rather hard to see the direct results of their CI work.

In addition to the above described topic, the interviewees were asked to describe particular situations in which CI can be used, e.g. to back up a decision. One situation has already been described above, namely the use of CI by the sales staff for arguing during client talks (e.g. company 6). Moreover, several CI use scenarios were described by the respondents. An energy supplier (company 9) and a pharmaceutical firm (company 12) use CI for pricing decisions; e.g. a product manager mentioned: "Jede Entscheidung, die unsere Preise betrifft, wenn wir zum Besipiel Preisanpassungen machen, wird durch die Situationsanalyse des Mitbewerbs unterstützt" (company 9).

In the insurance industry (company 14 and 15), CI is a part of the product development as well as the product modification process. Regarding the product development process within his company, a member of the market research team further explained: "Wenn es um eine Neuproduktentwicklung geht (...), schaut man sich zum einen an, was macht der Mitbewerb" (company 14). Nevertheless, he put into perspective that most of the times the rough product specifications are already predefined before CI steps in and CI is therefore mainly used to facilitate the decision making for smaller decisions and to assist in minor product modifications. Almost the same applies for a pharmaceutical company (company 12) where the respondent

remarked that, because of the high R&D costs and the long pre-launch phases due to product development, testing and registration, CI information will never influence launch decisions: "Also, ob wir jetzt ein Produkt launchen oder nicht, hängt jetzt nicht direkt von der Konkurrenz ab. Es beeinflusst aber sehr wohl unsere Planungen. Die Absatzplanung wird möglicherweise reduziert, wenn ich weiß, ob ein Konkurrent in den Markt kommt oder ob vier Konkurrenten in den Markt kommen". In this case, CI is also used to adjust planning and for making minor modifications. In contrast to the above mentioned cases, the CI practitioner from another pharmaceutical company noted that "(...) die strategischen Entscheidungen (...) auch immer mit dem Hintergrund was macht die Konkurrenz, getroffen werden" and she also added that CI might even influence launch plans when saying "Es (CI) fließt sehr viel in strategische Entscheidungen, vor allem wenn es um Launchpläne, langfristige Entwicklungen oder R&D-Programme geht" (company 13).

# Strategic vs. Tactical use of CI

The literature review within chapter 2.2 already presented the theoretical framework regarding the scope of CI. The current section presents the practical side of this topic by indicating in which way – strategic or tactical - CI findings are used in Austrian companies. To further support the findings on the strategic and tactical CI use proportion, some examples of strategic and tactical CI use in Austrian companies are highlighted at the end of this section.

Table 17 shows an overview of the strategic vs. tactical CI utilization proportion amongst the surveyed companies.

Strategic vs. tactical CI utilization	Respondents' IDs
Used for both	2, 3, 4, 7, 11, 15
Used for both but mainly tactical	1, 5, 6, 8, 14
Used for both but mainly strategic	10, 12, 13

Table 17: Strategic vs. tactical CI utilization

In general, it was difficult for the respondents to estimate the proportion of CI findings which are used for tactical or strategic purposes, e.g. the corporate strategy and planning manager of an automotive company (company 7) stated that CI is definitely used for both purposes in her company, however she was not able to name a specific

proportion ratio for strategic respectively tactical CI use. Certainly, the reason for this might be that, due to her position within the company, she is especially involved in all strategic company tasks and therefore it is hard for her to judge the tactical aspects and implications of CI. However, besides her, also a few other respondents mentioned the difficulty of differentiating between strategic and tactical use of CI and of ascribing a proportion ratio to the CI usage. All the respondents that gave an answer to this question<sup>24</sup> said that CI is used for both - strategic and tactical - purposes in their companies. Slightly over a third of the respondents only mentioned that CI is helpful for strategic and tactical tasks but were either not able to identify a certain ratio between the two use scenarios or saw the two equally distributed within their company. For marketing intelligence manager of a company from example, the the telecommunications industry explained that nearly all of their CI studies contain strategic as well as tactical components: "Also, man kann nicht sagen, das ist eine Studie für eine rein strategische Entscheidungsfindung, das kann man fast nicht sagen. Es beinhaltet immer auch taktische und kurzfristigere Themen. Es gibt natürlich Sachen wie Mystery Shopping, wo ich sage, das ist rein taktisch (...). Aber grundsätzlich haben die großen Studien immer einen Sowohl-als-auch-Aspekt." (company 2). In company 15, an insurance company, the respondent also saw both aspects present and further mentioned that CI within her company is used for strategic and tactical purposes in the same degree. However, she finally added that there is perhaps a small strategic backlog.

A third of the interviewees proclaimed that although CI is used for tactical and strategic purposes, this company practice assists mainly in tactical situations. The CI manager of a telecommunications firm answered that CI is used for a tactical as well as strategic purpose: "Sowohl als auch. Wird beides benutzt. Also natürlich überwiegt das Taktische, das Operationale, was jeden Tag passiert, weil es einfach irrsinnig viele Produkte gibt und dauernd an irgendwas gefeilt wird. Aber natürlich auch strategisch (...). Aber ich würde es jetzt ungefähr 70% taktisch und 30% strategisch aufteilen." (company 1). At a sportswear company, the marketing manager shared the same perceptions when saying that CI is sometimes used as an input for strategic decision making but added that "die meisten Sachen schon (...) mehr ins Operative reinfallen (...)" (company 6). The respondent from an energy supplier (company 8) immediately said that the CI work within her company is mainly done to help with tactical issues because most of the strategic decisions and therefore also the strategic CI is done by the

<sup>&</sup>lt;sup>24</sup> Note: This question was not fully touched during the interview with company 9 due to time constraints.

energy alliance to which her company belongs. Similarly, the market and competition analyst from another energy supplier (company 5) explained that she is mainly involved in tactical CI because most of the strategic decisions are taken on a corporate level.

The rest of the respondents – slightly less than a fourth – described their CI direction as more strategic. After describing the answer to this question as somehow difficult, the marketing manager of a bank brought forward that "(...) ich glaube, dass die strategische Überlegung und die strategischen Erfordernisse überwiegen. (...). Ich würde fast sagen, dass da eben die strategische Komponente wichtiger ist." (company 10). The same applies to a pharmaceutical company (company 12), where the respondent directly answered that CI is used "eher strategisch" within his company. The CI project manager of another pharmaceutical firm (company 13) first explained that within her company, it purely depends on the type of data whether it is used strategically or tactically and added: "Es fließt sehr viel in strategische Entscheidungen (...)" (company 13). She also gave a ratio by saying that "(...) das (CI) ist vielleicht (...) 70% strategisch und 30% taktisch relevant (...)" (company 13). As an explanation for the strategic focus of CI she mentioned that it is harder to use CI information for tactical purposes "weil man meistens auch nicht so schnell reagieren kann." (company 13).

Overall, these results are in line with the findings from a study carried out by Wright et al. (1999) who found that most companies use CI for tactical and strategic purposes but it was shown that overall, the focus tends more towards tactical utilization.

Concerning the practical use of strategic and tactical CI, a great variety of examples was given by the respondents. For instance, the market research & market development department of an airline (company 3) uses the gathered and analyzed strategic CI information especially in conjunction with their strategic focus, namely their expansion attempts in the CEE region. On the tactical CI side, the same respondent mentioned all types of benchmarking of other airlines. Furthermore, several examples of strategic respectively tactical situations in which CI input is used to assist decision making were given by the market research director of bank: а "Unternehmensstrategische Entscheidungen, das sind beispielsweise Fragen zur Positionierung des Unternehmens, Branding-Fragen, Markenwerte-Fragen, Slogans und solche Sachen. (...) operationale Marketingentscheidungen, also, welchen Spot haben wir jetzt, welches Inserat haben wir jetzt, welche Kondition habe ich jetzt, welche

Produkte habe ich jetzt." (company 4). Staying on the strategic side of CI, many other usage examples such as CI used for further exploring competitor mergers (company 12), CI gathered for R&D purposes and for making launch plans (company 13) or CI applied during communication planning (company 14) can be named.

When it comes to the use of CI for product decisions or other product related issues the respondents have different opinions whether this belongs to the strategic or tactical use of CI. The CI practitioner of one energy supplier made the following statement: "Unsere strategischen Entscheidungen sind, welche Produkte nehmen wir zu welchem Preis." (company 5) This concerns their product supply side; he also declared a part of their other product decisions that are backed up via CI as strategic in nature. Within the textile industry, certain product decisions such as material decisions are of strategic nature due to their long-term impacts and financial investment implications, as the marketing manager of a sportswear company explained in more detail: "Materialentscheidungen, das geht schon ins Strategische. Da sind oft schon Dinge damit verbunden, von denen man weiß, dass das mindestens ein Jahr dauert, wenn man sich dazu entschließt, dass das zum Einsatz kommt. Weil entweder müssen wir es erst beschaffen oder wir müssen es erst selber einmal stricken können und evtl. hat es mit Investitionen zu tun und meistens muss man Probetests machen (...)" (company 6). Contrasting to the previous examples, in which product related decisions are seen from a strategic perspective, the respondent from an insurance company talks about product related CI input as being rather tactical: "Also, im Produktbereich würde ich schon eher sagen für taktische Zwecke." (company 14) and thinks of tactical product fine tuning.

An additional example of tactical CI use as mentioned by the CI responsible of a pharmaceutical company (company 13) was the utilization of CI for reacting to local competitor actions. The most important example of tactical CI that was given by a third of the respondents (company 6, 8, 10, 11 and 12) was product pricing assisted by CI information. This means for example that, during the pricing process of a company, the pricing overview of the strongest competitors that is mainly gathered by the CI responsible is very often used as rough indicator.

Going in the same direction as the conclusion of chapter 2.2 regarding the theoretical framework behind strategic and tactical CI, the above listed results of the qualitative study perfectly show that the Austrian CI practitioners have the same point of view that was brought forward by authors like Heath (1996), Carlin et al. (1999),

Prescott (1999), Miree and Prescott (2000) and Abukari and Jog (2002) when they see CI as a very helpful company practice for supporting both, strategic and tactical decision making. In terms of industry-specific differences, it was only observable that the two pharmaceutical companies (company 12 and 13) tended to use CI mainly for strategic purposes. Certainly the ratio between strategic and tactical CI usage is not the same in each and every of the surveyed companies, however, all of the respondents spread the same message: that it is important to consider both aspects in order to carry out CI in a successful way.

# 5.5 Perceived benefits of CI and related issues

The previous chapters mainly dealt with findings relating to the organizational prerequisites of CI, namely the different stages of the CI process and only marginally with the application of CI. This means that for answering the questions of the previous sections there was no doubt at all that at least a very informal CI setup and process must already have been in place. Therefore, a basic and essential question has been neglected so far, namely whether conducting CI makes sense at all. In order to be justifiable, CI must create a certain value that has to be higher than the overall costs involved, since "Data incur costs, but information (evaluated data) which is properly communicated and acted upon can create value." (Fletcher and Donaghy, 1993, p.5).

Thus, the aim of this section is to critically explore the usefulness of CI and highlight the perceived CI benefits as indicated by the respondents involved in the qualitative study. Furthermore, the controversial topic of how to measure the CI value will be discussed. Finally, the current and future role of CI from the respondents' perspective will be examined.

### Perceived benefits of CI and the reasons for CI use

First of all, the study participants were asked to explain and to highlight the benefits they see coming from the practice of CI within their company. Additionally they were questioned regarding their expectations towards CI and whether CI creates the expected value. Due to the possibility that some of the respondents might react rather reserved when being asked about the overall sense of their work, some alternative

question formats were developed and applied in cases where the interviewer found it appropriate<sup>25</sup>.

In Table 18, the most frequently mentioned CI benefits<sup>26</sup>, as perceived by the respondents, are displayed. Certainly, most of the mentioned CI benefits or reasons for conducting CI are closely linked to each other. Accordingly, for a better overview, these benefits were grouped into umbrella categories as displayed in Table 18. Due to the close relationship between some benefits it was sometimes not easy to allocate them to a certain umbrella category. In such cases, the benefits were allocated to the umbrella group that seemed most appropriate.

Perceived benefits of CI/reasons for CI use	Respondents' IDs
gain better market knowledge	3, 5, 7, 8, 9, 10, 13, 14
get to know strengths & weaknesses of competitors + compare with them (benchmarking)	2, 4, 7, 8, 10, 13
shows own market position	2, 6, 7, 9, 11, 15
assists decision making	2, 3, 4, 5, 9
risk reduction	3, 4, 7, 9
long-run/strategic benefits	4, 7, 11, 12

Table 18: Perceived benefits of CI/reasons for CI use (top nominations)

More than half of the respondents named "to gain a better market knowledge" as one of the main benefits that can be directly related to CI. This umbrella category subsumes a variety of slightly different answers. The majority of the companies (company 5, 7, 8, 10 and 13) named "to know the market and to find out in which direction it is going" as a benefit that falls into this umbrella group. For example, the CI responsible marketing project manager of a pharmaceutical company described CI as "einfach absolut notwendig (...), um auch zu sehen, wie sich der Markt entwickelt" (company 13). The faster reaction to new market developments due to better market knowledge was mentioned by the market research & business monitoring director of an airline (company 3) as a major CI benefit and in approximately the same direction heads the respondent of an insurance company arguing that: "(...) wie man eigentlich aus der Vergangenheit schon sieht, kann man die Daten sehr gut einsetzen, um einfach besser auf die Gegebenheiten des Marktes reagieren zu können." (company 14). According to the product manager of an energy supplier (company 9), CI has become a must in his

<sup>&</sup>lt;sup>25</sup> See Appendix B for the interview guide including the alternative question formats.

<sup>&</sup>lt;sup>26</sup> Note: Only the most popular benefit groups are displayed in table 18. For a detailed list see Appendix H.

industry because of the fairly recent liberalization of the electricity and natural gas markets, which in turn led to a lack of market knowledge among the companies' managers due to the former regulated situation.

Another umbrella category among the vast list of perceived CI benefits is the group regarding the knowledge about strengths and weaknesses of the competitors. For the market research director of a bank (company 4) it is very clear that the reason for conducting CI is to acquire knowledge about strengths and weaknesses of direct competitors and in a next step to develop strategies out of this knowledge. In more detail he explained the following: "Der Grund (for conducting CI) ist sehr simpel. Wir sind nicht alleine auf der Welt. Und wenn ich nicht über den Tellerrand schauen würde, dann bin ich fehl am Platz und werde wahrscheinlich relativ schnell aus dem Markt rausfliegen. Das heißt, die Mitbewerber, die sind natürlich eine ganz elementare Sache, deren Stärke und Schwächen zu analysieren. Und nur dann, wenn ich das weiß, wo sind die anderen stark und wo sind die anderen schwach, kann ich natürlich auch meine eigenen Strategien daraus entwickeln." (company 4). In the daily B2B business of an automotive company (company 7), CI is also a vital input for acquiring purchase orders. The respondent from company 7 explained that it is especially important to collect information regarding the strengths and weaknesses of the competitors: "Wenn ich Kundenaufträge akquirieren will, damit ich einfach vorher weiß, wo ist mein Wettbewerber stark, wie muss ich da reingehen, um den Auftrag zu bekommen. Genau da, wo die anderen Schwächen haben, um genau da die Stärken hervorheben zu können und um gezielter reingehen zu können. Man weiß ja meistens, wer die Wettbewerber sind und dann kann man einfach besser sein Angebot stellen, wenn man sich vorstellen kann, was der andere machen würde." (company 7). The respondent from an energy supplier (company 8) sees the benefit of CI in the acquired possibility to orientate oneself within the market and to accordingly adjust the own company's direction if it seems necessary. She added that without this tool and the resulting changes some customers might even switch to a competitor as a result. For the CI practitioner of a pharmaceutical company (company 13), the reason for conducting CI is to learn about the competitors and their actions as well as their strengths and weaknesses. For her, it is "einfach absolut notwendig zu wissen, wie die Konkurrenz agiert (...)" (company 13).

Another important benefit of CI, which also belongs to the currently discussed CI benefits umbrella category of getting to know the competitors and of being able to compare with them, is the ability to benchmark and directly compare the own company

with the fiercest competitors. In the case of a bank (company 10) this CI feature is mainly used upfront as guidance in order to check the competitiveness of the developed plans. For the marketing intelligence manager of a telecommunication company (company 2), benchmarking is an integral part of CI and at the same time one of CI's main benefits: "Sich zu benchmarken einfach am Markt und ganz wichtig, zu sehen, wo man positioniert ist in den Köpfen des Marktes, sprich der Kunden, und wie steht man auch im Vergleich zum Mitbewerber, das ist natürlich auch eines der Hauptthemen." (company 2).

The previous quotation directly leads to the next CI benefits umbrella category, namely the possibility for a company to view its own market position through CI and hence the ability to better position itself. As the respondent from company 2 positively remarked, CI provides an external view of one's company, which is very important for all positioning purposes. In the same direction goes the marketing manager of a sportswear company who also appreciates CI for the positioning advantages it provides: "(...) wir brauchen etwas (...), damit wir unsere Position am Markt einschätzen können, das heißt, das Umfeld kennen und dass wir unsere Stellung, unsere Position am Markt, wir müssen sie eh nicht 100% ig wissen, aber dass wir sie ungefähr einschätzen können. Wo befinden wir uns, wo befinden wir uns beim Preis, wie ist unsere Preisschiene, von wo bis wo, wer sind die Markenwettbewerber, passt unsere Position für uns, passt das für unsere Märkte (...)" (company 6). Similarly, the respondent from an insurance company (company 15) saw the positioning topic as a reason for conducting CI. She put it in short words and said: "Damit man weiß, wo man steht." (company 15). However, not only the question where the own company stands right now can be answered with the help of CI, but also the future positioning plans can be judged better and the next steps can be backed up by meaningful CI information. The corporate strategy and planning manager of an automotive company integrated both aspects – the current and the future company positioning - in her answer: "(...) zum einen mal um überhaupt feststellen zu können, wie positioniere ich mich am Markt oder wie ist überhaupt einmal meine momentane Situation, wie ist meine Marktposition, um dann halt um zu überlegen, aufgrund der Daten die ich habe, wie sehen meine weiteren Schritte aus." (company 7).

The next CI benefits umbrella group, which will be explained in more detail, is a very broad and unspecific one and is closely linked to most of the other groups. This group of CI benefits concerns the decision making assistance. In order to give an example stemming from the existing literature on CI, in which the CI value with regard to decision making is described, Richardson and Luchsinger (2007) can be quoted: "Competitive Intelligence (CI) is becoming recognized as a means of verifying and analyzing the environment of operations to support better decision making" (Richardson and Luchsinger, 2007, p. 42). Several respondents have also declared that a very valuable benefit of conducting CI is its usefulness during decision making, e.g. the marketing intelligence manager of a telecommunications company said that "(...) dass es (CI) Nutzen bringt, aber in erster Linie der Entscheidungsfindung dient" (company 2). Three (company 3, 4, and 5) out of the 15 respondents reported that CI can assist the decision making process in such a way that the quality of the decisions becomes higher. However, the market and competition analyst of an energy supplier added a very valid point to this topic, namely that the quality of the decisions might increase through CI, "(...) aber es hängt auch mit der Qualität der Informationen zusammen, die man erhält." (company 5). At an airline (company 3), CI is not only believed to increase the quality of decisions, it is also believed to increase the decision making speed as can be seen from the quote of the company's market research and business development director who says that CI serves "(...) um den Entscheidungsprozess auch ein bisschen zu beschleunigen und auch qualitativ höherwertiger zu stellen." (company 3). All the previous quotes regarding the interconnection between decision making and CI see CI as a helpful tool for decision making, either because of a possible increase in decision quality or because of an increase in decision speed. The product manager of an energy supplier goes even further and says that CI is not only a helpful company practice when it comes to decision making; for him it is even vital and regarding the due diligence guidelines of his company it is indispensable to collect and consider CI information before making important decisions. Otherwise, "(...) wurde eine Entscheidung in so einer Unsicherheit nicht getroffen werden." (company 9).

The aforementioned benefit might also be partly ascribed to the next umbrella category, called "risk reduction". For the product manager of an energy supplier (company 9) a risk that CI is able to reduce is, for example, a loss in market share, caused by the ignorance of competitor information. In this context, he stated: "Es geht um die Risikominimierung, die wir machen wollen, auch aus Risiko des Marktanteilsverlustes heraus natürlich" (company 9). In the same direction goes the director of market research of a bank, who said that "(...) unser Geschäft ist sehr trivial, wir liefern Informationen, um Risiko zu reduzieren" (company 4). He added that

without CI, making the right decisions might work from time to time in the short run, but in the long run it would be too risky because a decision maker "(...) kann ohne Informationen nur aus dem Bauch entscheiden. Das ist hier und da eine gute Entscheidung, aber in the long run, auf Dauer ist das ein Blödsinn." (company 4). Similarly, the respondent from an automotive company thinks that without CI "(...)man würde doch eher im Blindflug durch die Gegend gehen und kann wesentlich weniger steuern. Also wenn ein Informationsmangel da ist, denke ich, dass Fehler passieren, die man von vornherein hätte vermeiden können." (company 7). When she speaks of the risk of making mistakes and taking the wrong decisions, she thinks of the tactical as well as the strategic aspects, but especially the strategic component is important for her in this respect because such strategic mistakes would have a much bigger impact. The respondent from an airline (company 3) also confirmed the contribution of CI to the reduction of risks by limiting or even totally avoiding surprises and making the effects of one's decisions and of competitor's actions more predictable. In the existing literature, the risk reduction benefit of CI is also seen as an important benefit – e.g. Britt (2006) quotes Arik Johnson<sup>27</sup> who says that "(...) it's all about making more confident, less risky decisions." (Britt, 2006, p.11).

The last umbrella category of CI benefits is entitled "long-run" or "strategic" benefits. The market and trend research manager from a sporting goods company (company 11) indicated that one benefit of CI is its usefulness for making strategic decisions. As was already brought forward above regarding the topic of risk reduction, the respondents from company 4 and 7 mentioned the long-run and therefore more strategic importance of CI during the interview. In the case of company 7, an automotive company, the respondent explained that they work with long-term planning and it is indispensable that CI is part of this. The respondent from a pharmaceutical company goes further and states that without CI, there would not be any important negative short-term effects, however, "langfristig könnte man schon ins Hintertreffen kommen." (company 12). This certainly shows that for him CI only creates benefits in the long run.

Besides the main CI benefit categories that were described in more detail above, many other CI benefits were mentioned by the study participants, e.g. product improvements based on CI (company 6 and 15), the possibility of price orientations for the own pricing process (company 5, 6 and 12), efficiency increasing possibilities (e.g.

<sup>&</sup>lt;sup>27</sup> Note: Arik Johnson is managing director of a consulting firm that specializes in CI (Britt, 2006, p.10).

cost or price savings as mentioned by company 1 and 5) or turnover increases (company 1). These benefits are not listed in Table 18 above because only the top nominations are listed there.

Despite the manifold perceived benefits of CI and reasons for conducting CI in the first place, some respondents (company 12 and 14) would not expect any huge disadvantages without CI. In the case of a pharmaceutical company (company 12), the respondent explained that without conducting CI there would not be a big problem as the market is strongly regulated, due to strict product registration guidelines and high R&D costs. A market research employee of an insurance (company 14) stated: "Es (not conducting any CI) würde uns nicht umbringen, aber es ist trotzdem ein Tool, das schon etwas bringt." He specified this by saying that the negative effects he would expect would concern the product fine tuning process. Nevertheless, all respondents mentioned at least one benefit they gain from conducting CI within their company, thus underlining the importance of CI in practice.

Based on the perceived and observed CI benefits, the central question of how to measure the bottom line benefit of CI will now be explored.

#### Measuring the value of CI

In chapter 2.4 the existing literature regarding the measurement of the CI value was depicted and summarized. This literature review clearly shows that until now, no possible way to measure the bottom-line value of CI that is also applied in practice was identified. The main problem is that it is impossible to ascribe a certain portion of the company success to CI because there are so many other influencing factors. The same problem applies to isolating the impact of other related company practices such as market research. As also pointed out in the literature review, without the ability to determine the value of CI and the contribution of CI to the company success, it will always be hard for CI practitioners to justify their work and to demand further resources. For this reason and in order to see how this topic is perceived among Austrian CI practitioners, the study participants were initially asked whether they try to measure the value of CI in any way, either quantitative or qualitative. All participants who mentioned that CI does not get measured in their company were further asked to give reasons for not measuring the CI value. Moreover, the respondents thought about

possible ways of measuring the CI value and talked about the possible benefits of being able to assess the value of CI and the problems of justifying their work without such a measurement method.

Regarding whether CI is measured, nearly all of the respondents described an unsurprising picture, namely the complete lack of any performance and value measuring processes in this field. Representing a telecommunication company (company 1), a CI manager declared: "Es (quantitative CI value) kann nicht wirklich gemessen werden" and added that nevertheless, qualitative measurement methods are in place, e.g. optimization surveys among internal CI customers. At an airline (company 3), the market research and business monitoring department, in which CI is conducted, has to achieve its business goals which are measurable. However, the company's respondent clarified that "(...) aber sie können keinen ROI von der Abteilung messen (...)" (company 3). Neither can there be measured a ROI from CI itself, according to him. The respondents from all of the three surveyed energy suppliers (company 5, 8 and 9) argued that the CI value does not get measured within their company. For example, the market and competition analyst from one of the observed energy suppliers clearly stated that the CI value is not measured in her company and additionally said: "(...) aber das kann man irgendwie nicht." (company 5). Moreover, she also posed the counter question of how measuring the CI value could be done because in her opinion it would be a very interesting thing to do. This certainly symbolizes the strong interest of the interviewee in CI value measurement possibilities. In the banking industry (company 4 and 10) the same scenario can be observed, namely that the CI value in numbers does not get measured at all. The marketing manager of one of the surveyed banks scaled down the need for a CI value measurement process because in his opinion the value of CI "(...) wird total erlebt und gesehen (...)" (company 10). Something similar can be observed in an Austrian sportswear company (company 6), the marketing manager of which stated that the measurement of the CI value does not take place at all in a quantifiable manner. He additionally told the interviewer that the CI value "wird eher pauschal gemessen, da wir ja auch (...) Eigenkritik üben oder Feedbackrunden haben  $(\dots)$ " (company 6), which can be seen as a qualitative way of assessing the CI value internally. For an automotive company (company 7), measuring the ROI of CI would be interesting, as it is not being done yet. This could further help to establish CI within her company because, as she states: "es ist jedem klar, (...) dass CI total wichtig ist. Aber so richtig verinnerlicht haben es, glaube ich, trotzdem noch nicht viele Leute (...)" (company 7). The respondents from several other companies (company 11, 12, 14 and 15) all described the same picture, namely that the CI value does not get measured within their companies. The respondent from a pharmaceutical company (company 12), for example, explained that the CI value does not get quantified (i.e. as a monetary value) but that it is somehow measured in appreciation. Out of all respondents only one representative from a telecommunication company did not state right from the beginning that the CI value does not get measured at all within her firm. She just mentioned: "Der Nutzen wird leider zu wenig gemessen." (company 2). After insisting on the question, she admitted: "Es ist teilweise schwierig zu messen" and explained in more detail how it is done in her company: "Wie es meistens gemessen wird, ist bei den Studien in der nächsten Welle, das heißt, hat es hier eine Verbesserung oder eine Verschlechterung in den Werten gegeben." After delving further into the questions regarding their measurement method it became clear that for this company, it is also not possible to asses the exact value of their CI activities because of a number of interfering factors.

Such interfering variables are already one reason why the measurement of CI value is seen as impossible. It is very important to identify the responsible factors for this lack of sufficient measurement methods in order to have a chance to develop valuable ones. Hence, in a next step the respondents were asked to name the reasons for not being able to measure the CI value. Some of the respondents (company 8 and 9) simply stated that they did not know how to measure it and some other interviewees (company 3, 11 and 14) only said that it was impossible to measure added value but did not give any specific reasons. The marketing intelligence manager of a telecommunication company (company 2) explained that it is not possible to ascribe certain business outcomes wholly to CI. As already described above and similar to a few other respondents (company 12 and 13), she further held the numerous other influencing factors responsible for the measuring difficulties. In a pharmaceutical company (company 12), measuring the CI value is perceived to be impossible because it is "(...) so ein multifaktorielles Geschehen. Ich glaube nicht, dass man wirklich einen Raster drüber legen kann, dass man das richtig bewerten kann mit einem vernünftigen Outcome." (company 12). Similar to company 12, the respondent from another pharmaceutical company (company 13) perceives it as impossible to determine the particular part of an outcome that has been caused by CI because of the effect that the

whole marketing mix and other influencing variables are having on, for example, sales figures. She believes that it is only possible to measure the costs of CI but not the value. For the CI practitioner of an insurance company (company 14), the measurement problem exists because the company's CI activities are totally integrated in the market research activities and it is therefore very hard, if not impossible, to separate the value and the costs of these two disciplines. The director of market research of a bank (company 4) knew that in the existing literature a few authors have already tried to quantify the value of CI and he also gave an example: "(...) also in der Wissenschaft, (...) da gibt es natürlich unheimlich clevere Formeln, die sagen, der Nutzen der Konkurrenzanalyse ist so hoch wie das nicht entstandene Risiko, so steht es in der Literatur." (company 4). However, he added that in theory this might be a nice approach but in real life it is practically impossible to measure the CI value. Nevertheless, he finally stated with conviction: "Aber der Nutzen ist da und man kann es einfach nicht objektiv quantifizieren." (company 4). The above mentioned reasons for not measuring the CI value had all one thing in common, namely the technical impossibility.

Certainly, those were not the only reasons given by the respondents. Although the respondent from an insurance company (company 15) immediately mentioned the measuring problems as the main reason for not assessing the value of CI, she admitted that if it even would be possible to measure, it still would be a question of cost before it would be done. This means that for her, it is also a question of the cost/value ratio. For two other study participants (company 4 and 12), measuring the CI value does not really make sense. In this respect the respondent from company 4, a bank, stated: "Quantifizieren von Nutzen bringt in meinen Augen in diesem Bereich auch nichts, es ist eher schwachsinnig, ich weiß, dass man in der Wissenschaft immer alles quantifizieren muss, aber hier ist es fast unmöglich ihn zu messen. (company 4). Similarly, for the CI practitioner at a pharmaceutical company such information would not have any additional value: "(...) damit generiere ich eine Information, mit der ich im Prinzip nicht wirklich was anfange." (company 12). In contrast to the statements above, some respondents were able to see and describe some benefits the measuring of the CI value would generate. Knowing the exact contribution of CI to the overall company success would definitely be an excellent argument in favor of CI (company 7). Almost the same benefit, albeit described from another perspective, was brought forward by two other interviewees (company 9 and 11). They responded that, at the moment, it is hard to justify CI within their companies because they are not able to

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include a quantitative CI value in their argumentations. For example, the product manager from an energy supplier (company 9) admitted that without being able to measure the CI value it is hard to justify additional CI staff. Contrary to these opinions, the respondents from company 8 and company 14 explained that the justification of CI is not more difficult due to this lack in measuring its benefits. In company 14, an insurance company, it is not a problem at all because CI is only seen as a by-product of market research anyway.

The findings above show that the difficulties in CI value measurement and the possible benefits of such measurement methods are manifold but most of them go in the same direction, namely that the value of CI is difficult to isolate. It was no surprise that the Austrian CI practitioners encounter the same challenges as their CI colleagues around the globe. However, during the interviews the impression grew that many of the respondents are not really missing the possibility to asses their CI output and do not put any efforts in changing the situation. Nevertheless, some of the respondents would very much appreciate an appropriate measurement approach because it would give them some interesting insights and feedback.

Despite the fact that the quantitative CI value does not get measured in any of the questioned companies, the respondents were asked to think about possible ways to measure the CI value. Due to the difficulty of the question and the perceived impossibility of measuring the CI value only three out of the 15 participants tried to find an answer. As already noted earlier in this section, the director of market research of a bank (company 4) thinks that one can only theoretically assess the CI value and he defines the CI value as high as the minimization in risk due to CI. The measurement method of company 2 was also already explained earlier, namely the comparison of changes in the values of a predefined variable of interest of two consecutive study waves. However, it is not possible to exactly measure the CI value with this method. The third respondent who tried to find an answer to this question works for an energy supplier (company 9) and gave a specific example of his CI activities from which one is supposed to calculate the value. This specific example was a price-elasticity analysis with consideration of the competitors. With the help of this analysis, the company is able to generate some extra turnover. Therefore the value of this specific CI activity can be calculated as the additional profit that has been gained due to this initiative. All in all it was once again confirmed that the major part of Austrian CI practitioners cannot see

any way of measuring the CI value at the moment and also do not think that it will be possible in the near future.

In summary, it can be said that none of the interviewed companies is measuring the CI value in a quantitative way and that only a few of the respondents mentioned that the value is seen and/or measured qualitatively. The main reason for not measuring the CI value was that it seemed to be an impossible task for the respondents. All this would be in line with the suggestions of Sawka (2002), who argues that it is impossible to measure the ROI of CI but that CI practitioners can track the effectiveness of their work with the help of three metrics, namely the CI utilization, the CI customer satisfaction and decision-specific results.

Other reasons for not measuring the CI value in Austrian companies were that it would not make any sense and that it would not justify the costs involved in measuring. However, this lack of CI value assessment does not seem problematic as only a few respondents stated that it is harder to justify CI activities when not being able to measure the value.

#### The current and future role of CI within the surveyed companies

So far, the benefits of CI and the problems of measuring the CI value have been discussed in this section. Nevertheless, the question considering the perception of the importance of CI in the respective companies and whether the future of CI looks promising or not, remains open. To further investigate these interesting topics, the study participants were asked to share their views on the current and the future role of CI within their company. Regarding the current situation of CI in their companies most respondents drew a positive picture:

Current role of CI	Respondents' IDs
positive situation	1, 3, 4, 5, 8, 9, 12, 13
neutral situation	10, 15
rather negative situation	7, 11, 14

#### Table 19: Current role of CI

The reasons for this mainly positive perception of the role of CI among the respondents are manifold. In order to present a complete picture, some of the explanations given by the interviewees will be highlighted in more detail. For example, the director of market research of an airline (company 3) explained that despite the

relative novelty of the CI topic, the department conducting CI and CI itself is very much accepted within his company. Another market research director, this time from a bank (company 4), mentioned that the benefits stemming from CI are seen internally and he furthermore described some internal popularity indications: "Intern wird der Nutzen gesehen, sonst würde es die Abteilung nicht mehr geben. Gute Indikatoren für den Stellenwert einer Abteilung beziehungsweise der Arbeit einer Abteilung sind, wie schnell man einen Termin beim Vorgesetzten bekommt und ob die Mitarbeiteranzahl und das Budget gleich bleiben bzw. steigen. Und bei beiden haben wir keine Probleme." All three respondents working at an energy supplier also described a positive situation in their companies when it came to the current role of CI. At company 5, CI activities are appreciated. At company 8, CI "(...) ist wichtig und es wird vorausgesetzt, dass es gemacht wird, aber es ist halt Tagesgeschäft und man ist es gewohnt, dass man über die Konkurrenz und über den Markt Bescheid weiß." (company 8). At another energy supplier, namely company 9, the significance of CI did certainly rise in the last few years according to a product manager. This recent increase in popularity of CI within the energy market can be easily explained by the liberalization of the market in Austria. In this respect, the product manager of company 9 further explained: "Also, vor 6 Jahren hat es das Thema überhaupt noch nicht gegeben, beziehungsweise schon im beschränkten Ausmaß, denn im Gasgeschäft war ja sozusagen der Mitbewerb immer die Ölindustrie, die Heizölindustrie. Da hat es das schon im gewissen Sinne gegeben. Und in jüngster Zeit ist man halt im Strommarkt eigentlich das erste Mal mit deutlich unter diesen Fundamentaldaten liegenden Kampfpreisen konfrontiert (...) und das muss man halt auch mit mehr Aufmerksamkeit analysieren und auch versuchen, Frühsignale zu erkennen um darauf eventuell geeignet zu reagieren. Also der Stellenwert ist eindeutig gestiegen (...)". A good CI popularity indicator within company 9 is certainly the high traffic rate on the internal CI intranet section. Both representatives from pharmaceutical companies (company 12 and 13) had the same perception that CI has become a vital company practice within their industry. The CI practitioner from company 12 ascribed high importance to CI when saying: "Das (CI) wird als absolut wichtig beurteilt. Der Stellenwert ist sicherlich ein hoher." The respondent from company 13 explained: "Es (CI) ist sicher ein wichtiger Teil im Pharmabereich." Regarding her own company, she said that CI has an important position and CI information is regularly used by other departments but sometimes it is treated more like a by-product. Overall, most of the

respondents had points of reference for an ongoing positive development of CI within their companies.

However, two respondents (company 10 and 15) described a somewhat neutral situation of CI at their companies, e.g. the marketing manager of a bank (company 10) perceives the CI activities within his company as established but yet not fully developed and the CI responsible from an insurance company (company 15) said that CI is definitely needed and most of her colleagues see it the same way. Nevertheless, CI could still have a much higher standing and could be more accepted within her company, as CI is often taken for granted and more or less also seen as a by-product of market research.

Interestingly, the corporate strategy and planning manager of company 7, an automotive company, drew a rather negative picture of the current role of CI within her company. This is especially interesting because in comparison to most of the other surveyed companies, company 7 carries out its CI activities in a rather sophisticated way. She complained that "(...) es ist jedem klar, jeder sagt, ja (...) wissen wir eh, CI ist total wichtig. Aber so richtig verinnerlicht haben es, glaube ich, trotzdem noch nicht viele Leute, weil einfach der Informationsfluss noch nicht da ist. Es ist noch nicht so institutionalisiert (...)." In her opinion, CI has no high importance yet and has not been enough institutionalized so far. Another respondent who depicted a slightly negative CI scenario was the market and trend research manager of a sporting goods firm (company 11). He recounted a discussion at his company on whether CI makes sense at all because his firm wants to set trends, and looking at the competition may be even harmful with such a strategy in mind. Additionally, he described CI as not being a core issue on which the focus lies. The third company in which CI is described as rather unimportant is company 14, an insurance company. At company 14, CI activities and its findings are not widely communicated and CI is perceived as a by-product of market research and product management. Finally, an interesting statement came from the marketing intelligence manager of a telecommunication company (company 2), who said that "Die Themen wechseln mit den Vorgesetzten. Also, es gibt Vorstände, die legen mehr Wert auf Konkurrenzdaten und Mitbewerberinformation, es gibt andere Vorstände, die legen weniger Wert darauf." (company 2). From her experience, the role of CI and its importance depend on the managers in charge. In this respect it must be said that "(...) with no real way to quantify the benefits of intelligence, senior management must be convinced that the function is worth the time and money spent on it" (Mellow, 1989, p.26), especially as management fashion might also influence this behavior because "(...) fashion drives corporate behavior to a larger extent than is realized" (Anonymous, 2007). Hence, the respondent from company 2 did not want to give a current CI situation status because the situation could change immediately.

However, when the question came to the future role of CI, she indicated a general trend, namely that CI will gain in significance and that it will be further expanded within her company. In general, the future scenarios of CI as described by the respondents were mainly positive in nature. A few interviewees (company 8, 13 and 14) think that CI becomes more important in the future due to the fiercer competition. The respondent from company 14 mentioned another reason for this development in his company, namely the dull market in the insurance industry. Only one study participant from another insurance company (company 15) believes that the role of CI will not change in a positive way in the near future and also gave a reason for this: "Der Stellenwert wird zirka gleich bleiben, auch wenn ich es als wichtig erachte, aber es wird weiterhin nebenbei laufen, da man dafür nicht mehr Geld in die Hand nehmen wird."

All in all, it can be expected that CI will further gain in importance within Austrian companies and it might even develop from a rather new and underdeveloped field of company practices into a major technique for achieving competitive advantage (Davis, 2004).

# 6 Discussion

The purpose of this study was to provide initial insight into CI practices in Austrian companies, relying on in-depth interviews as the qualitative research method of choice. Within this section, the broad tendencies within Austrian firms' CI activities as well as similarities respectively differences between the companies investigated will be elaborated. Therefore, the research questions (see section 3) will be discussed by integrating literature insights (see section 2) with key findings obtained from the in-depth interviews conducted (see section 5). Finally, research propositions which should be addressed by future research are provided.

# 6.1 Conceptual definition

The analysis and findings of the qualitative research were derived according to the previously established definition of CI: "As a process, CI can be defined as the continuous, systematic, legal and ethical way in which a company scans its internal and external environment, and here especially the competitive aspects of the firm's environment, gathers and analyzes publicly available information and in a last step uses this processed information to aid operative and strategic decision-making. When thinking of CI as a product, CI can be defined as the final outcome of the whole process and therefore CI is also the informed foundation which supports managers in their decision-making". This definition was based on the work of several different authors, such as Heath (1996), Kahaner (1996), Prescott (1999), Sammon et al. (1984), Zanasi (1998) and Vedder et al. (1999).

In-depth interviews reveal that the definition of CI provided by Austrian managers only partly reflect the normative view. Additionally, the way in which the CI process is carried out in actual business practice is greatly varying from company to company.

# 6.2 Current state of CI in Austrian companies

According to Viviers et al. (2005), "Literature shows that some countries, including France, Japan, Sweden and the USA are most advanced in terms of the level to which companies adopt and use CI." (Viviers et al., 2005, p.577). Viviers et al. (2005) further state that in these countries, CI has already become an acknowledged business practice for achieving competitive advantage. CI as it is practiced and described in such CI-leading countries is not the same as the one currently carried out in most Austrian firms. CI in Austria is a rather new and underdeveloped business discipline<sup>28</sup> and still needs some time in order to be able to fully develop. In the rest of this chapter, the topic at hand will be explored in more detail and different aspects of CI within Austrian companies will be discussed by answering the research questions outlined in chapter 3.

<sup>&</sup>lt;sup>28</sup> Note: Tarraf and Molz (2006) have experienced the same on a worldwide level, however not in practice but in theory by saying that "Competitive Intelligence (CI) is a relatively new and underdeveloped field in the management literature." (Tarraf and Molz, 2006, p.24).

Discussion

# 6.2.1 Familiarity with CI

Since CI is a rather new company practice, the first three research questions dealt with the general familiarity with the CI term in Austrian companies and the way in which Austrian CI practitioners define CI:

# RQ 1a: How familiar are Austrian CI practitioners with the term CI?

Due to the fact that only limited literature exists on CI so far (see Tarraf and Molz, 2006, p.24), it was not clear in advance whether the term "Competitive Intelligence" is known at all within Austrian companies. An extensive literature review showed that especially German language literature<sup>29</sup> on this topic has hardly been published so far. Therefore it was necessary to investigate how familiar Austrian managers are with the term of CI, if at all. In-depth interviews revealed that within the majority of large Austrian companies, this term is known; however, specific industries such as energy supply are still not well acquainted with the term. However, with today's management literature focusing more and more on this topic and the increasing popularity of CI in other European countries such as France or England, the CI term will definitely become more and more popular and accepted in Austria.

# RQ 1b: How do Austrian CI practitioners define CI?

In section 2.1, the theoretical definition of CI was derived by comparing and combining the most meaningful and accepted definitions of CI as outlined in relevant literature published up to now. Based on this conceptual definition of CI, section 5.1 of the findings looked at the definitions of CI that are common among Austrian CI practitioners. It was shown that the definition of CI as provided by practitioners was mainly limited to the phase of data collection while mostly neglecting other CI process stages that are implied in the theoretical definition of CI. Especially the analysis of the gathered information was not put into consideration by the respondents defining CI. Based on these results, it can be argued that the predominant view on CI amongst Austrian CI workers needs to be further developed, moving away from the definition of

<sup>&</sup>lt;sup>29</sup> See Michaeli (2004, p.3f) for a German CI literature overview.

CI as a way of collecting competitor information towards a more integrated and systematic approach, including information analysis and dissemination of the findings. Future research should closely look into the common understanding of CI among Austrian CI practitioners and further investigate the reasons for predominantly focusing on data gathering when defining CI.

#### **Research Proposition I:**

Austrian CI practitioners mainly focus on data collection when defining CI.

It would also be interesting to clarify whether the same phenomenon exists in other German-speaking countries.

# RQ 1c: Which terms are used to describe CI activities in Austrian companies?

As Michaeli (2004) already described in his article on CI in Germany "Competitive Intelligence (CI) has many names and flavors in Germany (...)" (Michaeli, 2004, p.2). The same seems to apply to Austria. As was already described at the beginning of this chapter, not everybody working in Austrian companies is familiar with the CI term. However, this does not automatically mean that CI is not carried out in companies not familiar with the English term. In such cases, CI-related activities simply run under a different header. Often, German terms, such as "Wettbewerbsbeobachtung", are used synonymously for CI-related activities. A wide variety of terms was named by the respondents in conjunction with their CI activities. In most of the German terms, words such as "Konkurrenz-", "Mitbewerbs-", "Wettbewerbs-" or "Markt-" were included. These terms explain the scope or the research subject of the activity and were mainly combined with terms explaining the type of activity carried out, such as "-beobachtung" or "-analyse". Only a small minority of the respondents declared that they use English terms such as "Competitive Intelligence" or "Marketing Intelligence" for describing their CI activities. Additionally, the English term "Market Research" or the German equivalent "Marktforschung" were used by some companies as headers for their CI practices. In summary, it can be said that the CI term is not widely accepted within Austrian companies and most of the firms prefer German equivalents for describing their CI activities.

Concerning the terms used for denominating CI activities it would be interesting whether the same tendency of using translations rather than the CI term exists in other non-English-speaking countries to the same extent as it is the case in Austria. Therefore the following research proposition can be made:

#### **Research Proposition II:**

The English term "Competitive Intelligence" is rarely used in non-English-speaking countries.

# 6.2.2 Organizational CI setup

Regarding the organizational CI setup, the findings of this study are in-line with findings from previous studies such as Badr's (2003), who observed a wide variety of different CI setups within the observed companies, ranging from part-time CI practitioners integrated into the marketing department to fully separate CI departments. However, one result was predominant, namely that few Austrian companies had a formal CI setup. The same observation of informal CI setups was already made by Gulliford (1998); however, he did not solely focus on Austria.

# RQ 2a: Who (in terms of job position) is responsible for CI in Austrian companies?

As expected, only a small minority of Austrian companies employ fully dedicated CI practitioners. The companies who do so are mainly operating in the competition intensive telecommunications industry. As CI in Austria is mainly associated with gathering information on competitors, it was unsurprising that in most of the surveyed companies, CI activities are carried out by the market research staff on a part-time or occasional basis. The empirical study revealed furthermore that marketing managers or employees are another group that takes care of CI work in some companies. Empirical research from other countries (e.g. Tao and Prescott, 2000; Badr, 2003; Wright and Calof, 2006) confirm these findings by showing that mainly market research and marketing employees are in charge of CI activities in cases where there is no dedicated CI person.

Hence it would be interesting to investigate whether CI is regarded as a part of marketing and/or market research activities or if it is regarded as a separate company practice that fits best within a marketing and/or market research department in cases where there is no dedicated CI person or department. Future research could therefore look at the following research proposition:

#### **Research Proposition III:**

*CI* is considered as a part of marketing respectively market research and not as a separate company practice.

#### RQ 2b: Which departments are responsible for CI work in Austrian firms?

Corresponding to the results from the previous research questions, a variety of departments can be regarded as leading the CI activities within the respective companies. However, also in line with the findings of the above question on the position of the CI responsible person, the majority of the companies have placed their CI activities within the marketing or market research department. None of the surveyed firms has a separated CI unit, which is in contrast to the findings of some other studies (e.g. Teo, 2000; Jaworski et al., 2002; Badr, 2003) where such a CI structure was reported. Nevertheless, this should not represent a stumbling block for Austrian companies' CI efforts since, according to Viviers et al. (2005), there does not exist a best practice in terms of centralized or decentralized CI units or regarding the subordination of the CI activities. This absence of a best practice is mainly due to the environmental differences that exist between companies from different industries. However, the structuring and the stability of the CI organization within a company definitely have an influence on the success of the CI process (see Jaworski et al., 2002, p.6). It certainly depends on the overall sophistication of the CI process and the ascribed importance of CI within a specific company whether a separate CI unit and/or dedicated CI personnel exists. Therefore, the overall importance of CI as a relevant business practice within Austria has to develop first.

Looking at the non-existence of separate CI departments in Austrian companies, an international comparison of CI sophistication between companies with and without a separate CI department could yield some valuable insights. Future research should therefore address the following research proposition:

#### **Research Proposition IV:**

Companies that have installed a separate CI department show a more sophisticated and better functioning CI approach.

RQ 2c: What types of resources (employees & budget) are assigned to CI in Austrian companies?

In terms of human resources invested into CI purposes, the findings drew a clear and at the same time rather negative picture. The number of dedicated CI staff in Austrian companies seems to be held at a minimum level. Except for one company from the telecommunication sector, no surveyed company has fully dedicated CI persons. This low level of human resource investments in the field of CI is contradictory to the findings from other countries (e.g. Wright et al., 1999; Teo, 2000), which report a significantly higher ratio of companies with at least one employee fully dedicated to CI. Regarding the CI budgets, it was revealed that most of the surveyed companies do not have a special CI budget. The budget needed for CI activities is most often part of the market research or marketing budget. The exact amounts of the CI budgets were not investigated due to the high confidentiality ascribed to this topic. However, all in all the respondents indicated that, if special investments were needed for CI purposes, it would not be hard to get the necessary funds.

RQ 2d: Is it possible to relate specific differences in terms of CI organization to certain differences in company characteristics (e.g. type of industry, size, etc.)?

Among the different company and industry specific characteristics investigated, only the competitive intensity of the industry appears to influence the differences in the CI organization to a certain degree. This finding seems logical, as companies stemming from an industry with a high degree of competitive intensity, such as the telecommunication sector, need to know a lot more about their competitors and prepare themselves in a more sophisticated way in order to stay competitive, compared to companies operating in strongly regulated and slowly changing markets. This finding is also reflected in the SCIP members list which includes a high number of SCIP members coming from highly competitive industries (see Miller, 2001).

All the other company characteristics (e.g. employee number, turnover etc.) do not appear to be an influencing factor regarding the CI setup in the surveyed companies. This might be the case for two reasons. First, as CI can be regarded as a new and rather undeveloped company practice in Austria, most of the companies can be considered to be positioned at the same basic level with regard to CI. Second, all of the surveyed companies belong to the top Austrian companies. Therefore, the individual company characteristics tend to differ not too widely. However, when comparing articles focusing on small and medium sized enterprises (e.g. Wood, 2001; Tarraf and Molz, 2006) with articles concentrating on large companies (e.g. Hannula and Pirttimaki, 2003), substantial differences regarding the CI organization and the execution of CI practices depending on the company size can be seen.

Future research should focus on specific industries, investigate all CI related topics and assess the CI sophistication that is predominant in the respective industry. In doing this, it can be observed whether a certain CI tendency is observable throughout an industry and whether industry specific factors, such as the competitive intensity, are triggers for this.

#### **Research Proposition V:**

*Companies within the same industry show similar CI approaches.* 

## 6.2.3 CI process in Austrian companies

Investigation of theory showed that most of the authors (e.g. Fletcher and Donaghy, 1993; Anonymous, 1997; Gulliford, 1998; Calof and Breakspear, 1999; Viviers et al., 2005; Wright and Calof, 2006) include the same stages when describing the CI process. These stages are "data gathering", "data processing and analysis", "dissemination of the findings" and "usage of the findings". In the context of this empirical study it was investigated to which degree these stages are also relevant and carried out in practice, respectively.

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Data collection issues:

RQ 3a: What type of information is collected with regard to CI?

A comparison of studies focusing on CI practices on a country-level showed that small differences exist between countries concerning the type of collected data. Whereas for example for Chinese (see Tao and Prescott, 2000, p.72) and Japanese (see Sugasawa, 2004, p.13) companies the technological developments and general industry trends are of major interest, the competitors' products and services, prices and conditions as well as financial data are of primary concern for Austrian CI practitioners. It was also suggested by the respondents that it is important that the collected information should be usable for benchmarking purposes in order to get a precise picture of the own company position.

Regarding the type of collected information it is questionable whether certain company characteristics or the country of origin of a company have an influence. Hence the following research propositions are of particular interest:

# **Research Proposition VI:**

The selection of the collected CI information is influenced by certain company characteristics.

#### **Research Proposition VII:**

The selection of the collected CI information is influenced by the country of origin of a company.

# RQ 3b: What type of information sources are used during the CI process?

The qualitative study showed that the internet and employees are the information sources of choice for Austrian CI workers. Empirical insights were found to further prove the claims of the scientific literature (e.g. Graef, 1997; Teo, 2000; Wood, 2001) on the popularity of the internet as a CI information source. The revealed importance of current employees as information sources for CI purposes is also consistent with the existing CI literature (e.g. Mellow, 1989; Wright and Calof, 2006). Additionally, a wide

variety of further information sources, such as information providers, official authorities or personal networks were mentioned by the respondents and also highlighted in previous empirical studies (e.g. Calof, 1997).

#### CI process:

### RQ 4a: Which stages of the CI process seem important for Austrian CI practitioners?

In contrast to the theoretical analysis of the CI process stages, the in-depth interviews revealed that Austrian CI practitioners primarily focus on the data gathering phase and more or less neglect other important steps of the whole process, such as data processing. It seems as if the theoretical construct of the CI process is not fully executed in practice, especially within companies that do not have a formalized CI process and do not ascribe a full focus towards CI. Nevertheless, all the different steps of the CI process can only live up to their full potential in a company that executes CI in a sophisticated way. This should be the case in countries with a long CI tradition where CI has already developed step by step over a long period of time, which is not the case in Austria where this company practice is relatively new.

In this context, future research should investigate the different steps of the CI process in more detail. It would be especially valuable to gain additional knowledge about how exactly Austrian CI practitioners carry out their CI analysis.

#### **Research Proposition VIII:**

Austrian CI practitioners conduct the individual stages of the CI process in a different manner than CI practitioners in countries with a long CI history.

#### RQ 4b: Which kind of CI work is predominant, ad-hoc or planned CI work?

The majority of the respondents to the qualitative study claimed to be primarily confronted with ad-hoc requests from other departments in various forms in terms of request frequencies. The predominance of ad-hoc requests in comparison to continuous or planned CI work has certainly to do with the current standing of CI in Austrian companies. CI is currently not a company practice which is being focused on but rather a by-product of other practices such as market research, and the human resources dispatched to this field are very limited. Therefore, it is nearly impossible to carry out a continuous CI approach or to plan a lot of CI activities in advance. Hence it is understandable that CI practitioners predominantly try to focus on satisfying the ad-hoc CI requirements of the company.

Further research should look into the different reasons behind ad-hoc, planned and continuous CI activities. It is important to find out if ad-hoc CI work is primarily conducted in companies that are either CI novices or run their CI activities in an unsophisticated way.

#### **Research Proposition IX:**

Companies that have started their CI activities very recently and/or conduct CI in an unsophisticated way show a higher percentage of ad-hoc CI requests compared to companies with an already well-established and/or sophisticated CI approach.

# RQ 4c: What kind of technical aid is used to support the CI work?

According to some authors (e.g. Fletcher and Donaghy, 1993; Chaves et al., 2000), the permanent advancements and innovations in information technology have also a major impact on CI. New technologies can facilitate different steps during the CI process and can therefore help to make the whole CI process more efficient. However, the analysis of the empirical study yielded a clear result for the investigated companies, namely that their CI practitioners do hardly make use of such supporting technologies and software. Only a few respondents mentioned the use of databases for storing CI information and the use of an intranet for disseminating the findings. Special CI software is not in place at any of the surveyed firms. The fact that CI in Austrian companies is still in its infancy is definitely a reason for the lack of technical CI support. Furthermore, the acquisition of CI software is often connected to substantial costs which Austrian managers often will, understandably, not be willing to cover for a new company practice before it has proven its value-adding capacity.

Nevertheless, further research should look into the correlation of the sophistication of the CI approach and the use of technical support for conducting CI. Therefore, the respective research proposition can be formulated as follows:

#### **Research Proposition X:**

Companies that have established sophisticated and advanced CI activities use technical aids, such as specialized CI software, for conducting CI.

Further research regarding technical CI support is important in order to investigate the ways in which technical hard- and software might support CI activities and to what extent this is possible.

## RQ 4d: How and to whom is the CI information disseminated?

Looking at the ways of disseminating CI findings and therefore summarizing the empirical as well as the theoretical findings (e.g. Marin and Poulter, 2004) on RQ 4d, it can be argued that overall, e-mails are the most popular means of CI distribution. The popularity of e-mails in this respect can be explained with the need for an immediate and fast communication of CI to numerous different recipients. Additionally, corresponding to the findings of Marin and Poulter (2004), the empirical study on Austrian CI practices identifies newsletters and the intranet as other frequently used tools for communicating CI findings. Hence, the Austrian sample provided the same insights as already existing literature with regard to the ways of disseminating CI information.

This is also true for the analysis of the addressees of CI findings in terms of hierarchy level respectively job position. The Austrian respondents exclusively identified managers, ranging from middle management up to the Board of Directors and the CEO, as the persons within their companies to whom they distribute their CI analyses. This result is in line with the findings of the study carried out by Marin and Poulter (2004), in which over 50 per cent of the respondents identified managers as the main users of CI. Empirical insights from both, the Austrian sample and the Marin and Poulter (2004) study, further suggest that in terms of departments, the marketing

department is one of the main users of CI. In the Austrian sample, it can be argued that the people who produce CI findings are at the same time the main users of CI because they have easy access to CI and can also adjust the CI output to their own needs when conducting CI work.

As the sample of this study included mainly large companies, it would be important for future research to look at small and medium sized companies and their ways of disseminating CI. Also, the recipients of CI information should be identified in such companies.

#### **Research Proposition XI:**

Small and medium sized companies use different ways of disseminating CI and the CI information recipients that can be identified are different from the ones in large companies.

Generally, there is a lot of room for further research on the CI situation within small and medium sized Austrian companies.

# RQ 4e: Is the CI output mainly used in a tactical or in a strategic way?

Chapter 2.2 on the theoretical differentiation between strategic and tactical CI already led to the assumption that it is important to consider both aspects when conducting CI. The findings of the empirical study further support this view as they show that, in general, Austrian CI practitioners use their CI efforts for both purposes. If any at all, one slight tendency can be observed in the responses to this question; the tactical side of CI seems a little bit more popular among the study participants. However, it was observed that a lot of respondents found it hard to estimate the ratio between strategic and tactical CI, therefore these findings have to be viewed with caution.

Additional research could focus on difficulties that might be encountered when CI practitioners try to cater to both, tactical and strategic decision making.

Discussion

#### **Research Proposition XII:**

CI practitioners should either focus on strategic or tactical CI because otherwise one could impair the other.

# 6.2.4 Perceived CI benefits and CI value measurement

Literature on CI (e.g. Lackman et al., 2000; MacKay, 2001; Jaworski et al., 2002) was found to promote various benefits of CI. However, several authors (e.g. Fuld and Borska, 1995; Vedder et al., 1999) furthermore observed a lack of tools for measuring those benefits in practice. As a result, some authors (e.g. Fourie, 1998; Subramanian and IsHak, 1998; Walters and Priem, 1999; Davison, 2001) tried to develop specific measurement methods for quantifying the CI value in order to prove the benefits of CI. Nevertheless, all of the developed measurement tools are difficult to implement in practice.<sup>30</sup>

The empirical insights of the qualitative study confirmed both, the existence of various CI benefits and the difficulties associated with CI value measurement.

# RQ 5a: What are the reasons for CI use and what are the perceived benefits of CI?

As the most prominent reason for conducting CI, "to gain better market knowledge" was put forward by more than half of the respondents. CI used for benchmarking purposes, showing the strengths and weaknesses of competitors and showing the own market position were additional benefits associated with CI. Furthermore, benefits stemming from CI activities that are often brought forward in respective literature (e.g. Britt, 2006; Richardson and Luchsinger, 2007) and were also mentioned by the respondents are "decision making assistance" and "risk reduction". A third of the respondents named "long-run/strategic" benefits as perceived benefits of CI. The examples above show that the reasons for conducting CI that were given by the study participants are manifold. In this respect, the study findings are in line with the literature. In conclusion, it can be said that Austrian CI practitioners are able to give various reasons for conducting and investing in CI. However, the main challenge for them now is to deliver proof for the mentioned benefits by measuring the CI value.

<sup>&</sup>lt;sup>30</sup> See chapter 2.4 for a briefing on CI value measurement attempts.

RQ 5b: Do Austrian companies measure the value of CI? If yes, how do they measure the value of CI? If not, why do they not measure the value of CI?

The literature review in chapter 2.4 clearly depicted the existing challenges that accompany CI value measurement. This is certainly not only a theoretical problem. The empirical findings suggest that Austrian CI practitioners are trying to cope with the same challenges. None of the respondents reported to have found a way to measure the bottom line value of CI in a quantitative way. Even the companies that execute CI in a very sophisticated way are still not able to measure the value of their CI activities. The main reason for this lack of a functioning measurement tool is the existence of a variety of possibly interfering variables. This makes it impossible to separately calculate the particular part of a firms' bottom line outcome that can be ascribed to CI. In summary, it can be concluded that at the moment Austrian CI practitioners do not see any possibilities for objectively calculating the CI value and they seem to have accepted this situation. Some of the respondents try to measure the CI value in a qualitative way by receiving feedback from internal CI recipients. Some other respondents are not even sure whether they would measure the CI value at all if a measurement tool existed, because they either see no need for measuring the CI output value or they assume they would not be able to justify the costs involved in measuring the CI value.

## RQ 5c: Are there any problems related with not being able to measure the CI output?

Investigation of scientific literature yielded a rather clear picture of the problems related to the lack of an adequate measurement tool for measuring the CI value. The literature review in chapter 2.4 suggested that it is hard for CI practitioners to justify their activities and to gain in reputation without the ability to measure the CI value in a quantitative way. In reference to the empirical findings on RQ 5c it must be concluded that Austrian CI practitioners were in disagreement regarding the problems associated with this lack of CI value measurement tools. It was shown that some respondents found it harder than others to justify their CI efforts without being able to include a quantitative CI output into their argumentation. Summarizing the empirical as well as the theoretical findings on RQ 5c, it can be concluded that, in general, a commonly accepted CI value measurement tool would certainly help with further promoting the CI

idea, even if the reputation of CI is currently not seen as a problem by some of the study participants.

The whole topic of CI value measurement is a rich area for future research. Further research should continue with developing tools for measuring the CI value. Such tools would give CI practitioners the opportunity to quantify the value of their activities and would help companies to take a close look at the cost/value ratio of CI and optimize their CI efforts.

#### **Research Proposition XIII:**

The ability to measure the CI value will be an important tool for CI practitioners in order to promote their work and it will help companies optimize their CI activities.

RQ 5d: What is the current role of CI within Austrian companies and how does the future of CI look within Austrian companies?

Despite the observed unsophisticated CI approaches in most of the surveyed Austrian companies, the majority of the respondents assessed CI as a positive activity within their respective company. Nevertheless, a few study participants mentioned the need for further establishing and developing their CI activities and efforts. Interestingly, most of the companies that carry out CI at a very rudimentary level described a positive picture, whereas for example one respondent from a company with a highly focused CI approach reported a negative situation and saw the need for even further institutionalizing their CI approach. It can be concluded that respondents from companies that have already installed a highly sophisticated CI approach know a lot about the possibilities regarding CI activities in general and therefore show a rather critical attitude towards their own CI efforts.

Regarding the future role of CI, both the existing literature (e.g. Viviers et al., 2005) as well as the empirical findings of this thesis predict an increase in the overall importance of CI and therefore suggest a positive development of this company practice. Some respondents mentioned the expectation of fiercer competition as the main reason for the further development of CI activities within Austrian companies.

All this suggests that CI will further develop and become a very important company practice in the future.

Given this tendency from the CI practitioners' point of view, it is suggested to engage in further research and address the question on the current and future role of CI from a top management point of view. This would give a clear picture of the CI significance within the respective companies and should provide a good insight into the future of CI in terms of importance within Austrian companies.

#### **Research Proposition XIV:**

Austrian CI practitioners have a different point of view than Austrian top managers regarding the current and future role of CI.

## 7 Conclusion

CI as a steadily developing company practice and its importance for various business functions of a company and here especially marketing is currently getting more and more attention in scientific literature. However, the majority of authors investigate CI and all related issues in countries such as the USA, Japan, France and England, where CI already had time to develop and mature. Therefore, most of the existing literature (with the exception of, for example, Stankeviciute et al., 2004) fails to give insights on CI practices in countries where this company practice is still relatively young.

Addressing this lack, this study gives insights into the CI practices in a small European country, namely Austria. This study should help Austrian managers and especially marketing managers to (a) see what is currently done in Austrian companies in terms of CI, (b) show the differences to other more CI sophisticated countries and the potential that lies in this company practice and (c) initiate the right actions and changes in terms of CI structure, CI resources and CI processes in the readers' companies.

The comparison of the findings of the empirical study with the current literature on CI clearly shows that Austrian companies still miss out on a lot of potential regarding their CI activities. Nevertheless, the lack of a functioning and commonly accepted method for measuring the CI value seems like a stumbling block for further establishing the CI profession around the globe. CI first has to prove its value within Austrian companies in order to further develop.

Marketers coming from less CI-sophisticated countries around the globe could profit from the findings of this study by comparing their CI activities with the CI practices from companies operating in a similar environment. By doing that, they can incorporate new ideas with regard to their daily CI work and even implement the most promising elements in order to make another step towards reaching CI's full potential.

Although some first important insights into the CI practices of Austrian companies and into the attempts of measuring the CI value were given in this study, there are still a number of issues that need to be further investigated and clarified by future research. Therefore, the research propositions, which were developed by looking at the existing literature as well as the findings of the qualitative study, are a good starting point for further research and should hence be addressed. An interesting way of further investigating CI practices in Austria would be to integrate the findings of this study into a quantitative study looking at CI practices in Austria and compare the results with similar studies from other European countries. This would be especially interesting for the reason that, due to this study's qualitative nature and small sample size, the findings of this thesis can only give a first insight into the topic and it is not possible to generalize the results.

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## **9** Appendices

### A: Interview Guide

1. Frageblock
<ul> <li>Sind Sie mit dem Begriff "Competitve Intelligence" vertraut?</li> <li>Können Sie bitte CI kurz beschreiben? Was verstehen Sie unter dem Begriff, bzw. was gehört alles dazu?</li> <li>Unter welchem Begriff läuft Wettbewerbs- + Umfeldbeobachtung in Ihrem Unternehmen?</li> </ul>
2. Frageblock
<ul> <li>Wie läuft der Prozess ungefähr ab?</li> <li>Was sind die wichtigsten Schritte im CI Prozess?</li> <li>Welche Abteilungen sind involviert?</li> <li>Werden technische Hilfsmittel verwendet?</li> <li>Wie viele Mitarbeiter sind mit CI beschäftigt</li> <li>Gibt es ein eigenes CI Budget, etc.?</li> </ul>
3. Frageblock
<ul> <li>Welche Informationen werden gesammelt? International und/oder National?</li> <li>Welche Informationsquellen werden verwendet?</li> </ul>
4. Frageblock
<ul> <li>Handelt es sich großteils um Auftragsarbeiten verschiedener Abteilungen oder um regelmäßig durchgeführte CI Tätigkeiten?</li> <li>Wird hierfür ein Jahresplan erstellt?</li> </ul>
5. Frageblock
<ul> <li>Was wird mit den gewonnenen Informationen gemacht?</li> <li>Wer sind die Kunden?</li> <li>Wie werden die Informationen weitergegeben?</li> <li>Für welche Zwecke werden die Informationen gebraucht?</li> <li>Wie werden die Informationen verwendet?</li> <li>Werden die Produkte des CI Prozesses für strategische, taktische oder beide Zwecke genutzt?</li> </ul>
6. Frageblock
<ul> <li>Was ist eigentlich der Grund für den CI Einsatz?</li> <li>Was erwartet man sich davon und was bringt es tatsächlich?</li> </ul>
oder

- Stellen Sie sich vor, dass in Ihrem Unternehmen keine Wettbewerbsinformationen gesammelt werden, welche Auswirkungen hätte das auf Ihr Unternehmen? • Der Großteil der österreichischen Unternehmen betreibt keine CI, wie glauben Sie wirkt sich das auf deren Performance aus, vor allem im Vergleich zu Unternehmen die CI betreiben? Welche Rolle nimmt CI im Unternehmen ein und wie sieht die Zukunft von CI • in Ihrem Unternehmen aus? Wird in Ihrem Unternehmen der Nutzen von CI gemessen? • • Wenn ja, wie und gibt es Probleme damit? 7. Frageblock Persönliche Informationen (Werdegang) + aktuelle Position •
  - Kennen Sie CI Verantwortliche in anderen Unternehmen die eventuell interessiert wären auch an dieser Studie teilzunehmen?

### B: Contact Summary Form

Contact Summary Form – Standardized Summary – Firm 1

Contact Type: In-Depth-Interview Contact Date: 6<sup>th</sup> June 2006

Contact Date: 0 June 2000	
Company characteristics	
Employees:	2.166
Annual turnover:	€ 1.726.600.000
Market standing:	Market leader
Industry:	Telecommunication
Competitive intensity in industry:	Very high
Interviewee's familiarity with CI term	
Interviewee has heard term before:	Yes
Competitive Intelligence definition:	Market observation regarding direct competitive environment
Terminology in respective company:	Competitive Intelligence
CI organization in company (organization	
Position of the CI responsible:	Competitive Intelligence Manager
Department:	Marketing/Market Intelligence
CI integration in company:	National: Competitive Intelligence Manager within marketing
Ci integration in company.	department; international: staff unit "Market Intelligence" (market research & reporting, market analyses & trend analysis and international competitive analysis; 3 persons)
Number of employees involved in CI:	1 <sup>1</sup> / <sub>2</sub> persons
CI Budget:	Own CI budget per year (e.g. for external information
CI Budget.	provider)
CI data collection issues	
Type of collected information:	Operative reporting (competitor's products, internal processes
	of competitors, customer service, CRM.) + strategic
	information (key figure analysis, opportunities of
	competitors), new trends
Sources of information:	Regulatory authority, publicly available information sources
	(e.g. media, internet, newsgroups, databases), press
	conferences, mystery calls at competitor's hotlines, mystery
	shopping, informal network, information provider (e.g. direct mailings)
	mannigs)
CI process in respective company	
CI process in general:	Mainly operative work, information gathering + analysis
Ad-hoc requests vs. annual plan:	Commission work exists; mainly monitoring of current daily
	business
Technical aid used:	E-mail, databases, intranet
Dissemination of CI information:	E-mail (daily), newsletter (aggregated information, monthly),
	alerts via SMS/e-mail (important information to key persons),
	intranet (historical data, analysis, reports)
CI information receiver:	Management level (upper + middle), selected people in
	different fields (e.g. marketing, business development, sales)
Use of CI information:	Daily pull-and push information, CI Manager is able to see
	that information is getting applied
Strategic vs. tactical use of CI:	70% tactical + 30% strategic use
Benefits of CI	· · · · · · · · · · · · · · · · · · ·
	Competitive advantage (not quantifiable), direct turnover
Reasons for CI use/perceived usefulness	increase (not quantifiable); cost + time savings (normally
Reasons for CI use/perceived usefulness of CI:	product managers do this work)
of CI:	
	No quantitative measurements in effect (impossible);
of CI:	No quantitative measurements in effect (impossible); qualitative measurements are in place (optimization surveys
of CI:	No quantitative measurements in effect (impossible);

Contact Type: In-Depth-Interview Contact Date: 6<sup>th</sup> June 2006

Company characteristics	
Employees:	460
Annual turnover:	€ 172.000.000
Market standing:	Niche provider
Industry:	Telecommunication
Competitive intensity in industry:	Very high
Interviewee's familiarity with CI term	
Interviewee has heard term before:	Yes
Competitive Intelligence definition:	Gathering of all relevant information about competitors
Terminology in respective company:	Marketing Intelligence
CI organization in company (organizatio	nal factors)
Position of the CI responsible:	Marketing Intelligence manager
Department:	Marketing
CI integration in company	Marketing Intelligence/Market research part of Marketing;
	done by one person
Number of employees involved in CI:	1 (also responsible for market research), used to be 2
CI Budget:	Own Marketing Intelligence budget, part of Marketing budget
CI data collection issues	
Type of collected information:	Information that can be benchmarked (e.g. key figures);
	positioning information; competitors' product information,
	information about whole environment, market trends,
	importance of information quality instead of quantity
Sources of information:	Studies from big research agencies, market research
	companies, internet
CI process in respective company	
CI process in general:	Collect and/or purchase competitor information,
	benchmarking, analyze data and distribute findings (to senior
	management, line manager), facilitate/assist knowledge- and
	information transfer, other departments (e.g. market
	communications) get involved
Ad-hoc requests vs. annual plan:	Annual study plan set up at the beginning of the year + ad-hoc
	studies
Technical aid used:	
Distribution of CI information:	Presentations, e-mail (involved departments receive entire
	report; board of directors receives condensed information/summary), newsletter "Market News"
CI information receiver:	Involved departments get whole report, board of directors
er mormaton receiver.	(especially head of marketing) receives all the studies
Use of CI information:	Hard to follow up
Strategic vs. tactical use of CI:	Used for both; no study contains solely strategic implications
÷	
Usefulness of CI	The California de de de la companya
Reasons for CI use/perceived usefulness	Useful for the decision making, marketing intelligence gives
of CI:	you an external view of your company, benchmarking very
	important, tells you where you are positioned in comparison to competitors
Measuring CI effectiveness/value:	too little measuring of the CI effectiveness (hard to measure);
neusuring er eneenveness/varue.	Comparison of changes in the values of two consecutive
	study waves; hard to measure due to many different
	influencing factors, no qualitative measurements, not
	possible to ascribe certain business outcomes wholly to CI
Role in company (perceived importance):	
Role in company (perceived importance):	Trend: CI is going to gain in significance and is going to be
Role in company (perceived importance):	

Contact Type: In-Depth-Interview Contact Date: 13<sup>th</sup> July 2006

Company characteristics	
Employees:	8.582
Annual turnover:	€ 2.458.800.000
Market standing:	Established but not dominating; niche provider
Industry:	Transportation/Airline
Competitive intensity in industry:	Very high
¥ ¥ ¥	Very mgn
Interviewee's familiarity with CI term	
Interviewee has heard term before:	Yes
Competitive Intelligence definition:	To have the big ear at the market; an intelligent way to deal
	with information (problem of information overflow)
Terminology in respective company:	Not CI but Market Research & Market Development
CI organization in company (organization	nal factors)
Position of the CI responsible:	Director Market Research & Business Monitoring
Department:	Market Research & Market Development
CI integration in company:	Market Research & Market Development is part of Network
	& Sales (= Marketing department where product planning
	and sales are put together)
Number of employees involved in CI:	5 persons in department but no dedicated CI-employee
CI Budget:	
CI data collection issues	
Type of collected information:	Competitors' product portfolio, performance monitoring of
Type of concered information.	competitors (this task will be shifted to the finance
	department); pricing in separate pricing department
Sources of information:	International sales force, persons in other departments;
	external information provider
	· · · · · · · · · · · · · · · · · · ·
CI process in respective company	Detection of a second state to second state of a
CI process in general:	Detection of new markets/possible destinations, find out what
	competitors are doing and how they might react; develop
	counter tactics, all the information gets collected in this
Ad-hoc requests vs. annual plan:	department and one database (non-electronic) develops Once a year development of self defined work program (in
Ad-noc requests vs. annuar pran.	accordance with most important interfaces) + updates if
	necessary; very often ad-hoc research (commission work)
Technical aid used:	No single database system; information is sorted theme
reennear art used.	specific in especially created folders
Distribution of CI information:	Not all folders are open for everybody, however some are
CI information receiver:	rectal folders are open for everybody, nowever some are
Use of CI information:	
Strategic vs. tactical use of CI:	Used for both: strategic use for example decisions regarding
	expansion in Eastern Europe; tactical use e.g. benchmarks
	with other Airlines
Usefulness of CI	Easter reaction: no surprises (things should become to some
Reasons for CI use/perceived usefulness	Faster reaction; no surprises (things should become to some
of CI:	extent foreseeable); makes decision making process faster + qualitative better
Magguring CL offootivonage/volver	*
Measuring CI effectiveness/value:	No measurement of CI effectiveness; not possible
Role in company (perceived importance):	Topic is relatively new in the company; department is
	accepted

Contact Type: In-Depth-Interview Contact Date: 26<sup>th</sup> July 2006

Company characteristics	
Employees:	11.100
Annual turnover:	€ 154.300.000.000
Market standing:	One of the market leaders (Established but not dominant)
Industry:	Banking industry
Competitive intensity in industry:	medium
Interviewee's familiarity with CI term	¥7
Interviewee has heard term before:	Yes
Competitive Intelligence definition:	Martin and Kaulmannan dans and/an Martin and
Terminology in respective company:	Markt- und Konkurrenzanalyse and/or Markt- und
	Konkurrenzbeobachtung
CI organization in company (organization	
Position of the CI responsible:	Director of corporate market research
Department:	Market research (own staff unit, directly under general
	director)
CI integration in company:	Part of market research, all market research integrates the competition
Number of employees involved in CI:	7 persons for market research of 12 countries, no dedicated
	CI persons
CI Budget:	
CI data collection issues	•
Type of collected information:	Nearly all market research analysis also done for the
Type of conected information.	competitors (makes only sense in relation), e.g. standard
	market evaluation, customer share, advertising research,
	conditions analysis; regularly positioning analysis about the
	different competitors
Sources of information:	External information providers (e.g. market research
	institution), knowledge of field staff also used
CI process in respective company	
CI process in respective company CI process in general:	Information gathering + analysis in comparison to own
er process in general.	company; Computer simulation of possible competitor moves
Ad-hoc requests vs. annual plan:	1. Standard market research done automatically; 2. Cause
Au-noe requests vs. annuar plan.	related for internal customers (integrated in the annual market
	research plan); 3. Classical ad hoc research
Technical aid used:	
Distribution of CI information:	Written and oral; findings mainly distributed via
	presentations; certain persons receive newsletter (e.g. once a
	month update on competitors conditions); no intranet
	database with CI info
CI information receiver:	Initiator + general director
Use of CI information:	No distribution of numbers, solely interpretations and
	recommended actions
Strategic vs. tactical use of CI	Used for both: 1. for company strategic decisions
information:	(positioning, branding, etc.), 2. for operational marketing
	decisions (spots, print as, conditions, products, etc.)
Usefulness of CI	
Reasons for CI use/perceived usefulness	For developing strategies one must know strengths +
of CI:	weaknesses of competitors; goal: information for reducing
	risk; better decision quality; important in the long run
Measuring CI effectiveness/value:	Not measured; possible in theory but not possible in real life;
intersaring of effectiveness, value.	measuring CI effectiveness does not make sense; value is
	there but can't be quantified objectively
Role in company (perceived importance):	Benefit seen internally, employee number + budget stay the
in company (porcerved importance).	same or even rise = indicator for importance
	same a star not material for importance

Contact Type: In-Depth-Interview Contact Date: 27<sup>th</sup> July 2006

Company characteristics	1 707
Employees:	1.797
Annual turnover:	€ 834.100.000
Market standing:	Regional market leader
Industry:	Energy supply
Competitive intensity in industry:	Low (except for business clients)
Interviewee's familiarity with CI term	
Interviewee has heard term before:	no
Competitive Intelligence definition:	
Terminology in respective company:	Marktbeobachtung, Konkurrenz- or Mitbewerbsanalyse
CI organization in company (organization	nal factors)
Position of the CI responsible:	Market and competition analyst
Department:	Marketing and distribution services/ Team Strategy and
_ · F	Planning
CI integration in company:	CI person is part of Marketing and reports to team leader +
	CEO
Number of employees involved in CI:	1 person part time (65% of full time) but main work is related
	to market research
CI Budget:	Yearly budget between 70k and 100k € (for market research)
CI data collection issues	
Type of collected information:	Mainly price watch; customer switch info (why they changed
Type of concetted information.	and what did the competitors offer); Advertising budgets +
	motifs; annual reports of the competitors get monitored by the
	corporate strategy department
Sources of information:	E-Control tariff calculator, APA-Online Manager, switching
	customer surveys, customer consultant (business clients),
	report of the European union of energy providers;
	Advertising data bought from info provider
CI process in respective company	
CI process in respective company CI process in general:	CI runs along with different market research (exception: price
er process in general.	analysis is pure CI); ad price: information stays in the back of
	her mind and is used for the yearly planning; customer
	consultants send info directly to market analyst; works
	together with all departments; once a year summary of all
	competitors (electricity + other energy sources)
Ad-hoc requests vs. annual plan:	regular but not standardized price watch, a lot of ad-hoc
	research
Technical aid used:	
Distribution of CI information:	Always in a written form; presentations of market research
	studies + findings get sent out; report to team leader + CEO
	via e-mail; monthly reports via e-mail
CI information receiver:	Team leader + CEO + concerned persons
Use of CI information:	CI analyst makes suggestions for action; is able to see results
Strategic vs. tactical use of CI	Most strategic decision are taken on a corporate level;
information:	strategic decisions within distribution + energy production are
	product decisions, so CI information in this part of the
	company is mainly used tactically
Usefulness of CI	
Reasons for CI use/perceived usefulness	Better knowledge of the market; right placement of products;
of CI:	efficiency; price watch is obligatory to get an informative
	basis; higher quality of decisions (depends on the info
Measuring CI effectiveness/value:	basis; higher quality of decisions (depends on the info

Contact Type: In-Depth-Interview Contact Date: 27<sup>th</sup> July 2006

Company characteristics	a.c.
Employees:	240
Annual turnover:	€ 26.500.000
Market standing:	Niche provider
Industry:	Textile (sportswear)
Competitive intensity in industry:	High
Interviewee's familiarity with CI term	
Interviewee has heard term before:	No; abbreviation CI is a little bit irritating (CI = Corporate
	Identity)
Competitive Intelligence definition:	CI = to carry out intelligent competitive comparison
Terminology in respective company:	No special term
	*
CI organization in company (organization	
Position of the CI responsible:	Marketing Manager
Department:	Marketing - Sales
CI integration in company.	
Number of employees involved in CI:	1 (not fully dedicated)
CI Budget:	
CI data collection issues	
Type of collected information:	Sales & Marketing side: how do competitors act on the
	market (e.g. advertising, retail coops, packaging), price watch
	(price range of competitors), bestseller of competitors;
	Production side: product treatment, material construction;
	focus on key markets (A, D, CH, I); strategic development
	(financially, mergers, etc.) of competitors does not get
	monitored specifically but is gathered along the way
Sources of information:	Competitors' products get tested by employees; sales reps +
	sales manager + general agents have to collect info
	permanently; company homepages; trade fair booths; press
	info; customer talks at trade fairs; magazines; newspapers
CI process in respective company	Valuation data 4 times a year (callection briefing + pricing
CI process in general:	Valuation date 4 times a year (collection briefing + pricing for summer + winter collection) when competitors analysis
	are deliberately carried out; collection of info is done
	permanently and at a certain date everything analysed; for
	each market the few main competitors to watch get defined
Ad-hoc requests vs. annual plan:	Continuously data collection; analysis 4 times a year
Technical aid used:	Problems with clearly arranged documentation of CI info in a
rechinical ald used.	database; in the course of the software-redesign this should be
	integrated
Distribution of CI information:	Distribution in written form; in the future maybe through
Distribution of CI information:	• •
CI information receiver:	intranet Sales reps; product management, marketing + sales
Use of CI information:	Sales: for arguing when talking to clients; Marketing +
	Product Management: have to implement findings
Stratagia ve teatical ves of CI	Strategic: material decisions (linked to investments); mainly
Strategic vs. tactical use of CI information:	
	used operatively (e.g. price)
Usefulness of CI	
Reasons for CI use/perceived usefulness	CI-activities never useless: important for price orientation,
of CI:	product improvements, judging own market position
	(regarding price, product, etc.) & argumentation in customer
	conversations
Measuring CI effectiveness/value:	Not in numbers
Role in company (perceived importance):	
	·

Contact Type: In-Depth-Interview Contact Date: 12<sup>th</sup> September 2006

Company characteristics	
Employees:	11.991
Annual turnover:	€ 4.200.000.000
Market standing:	Dominating
Industry:	Automotive parts & components
Competitive intensity in industry:	Medium to high
Interviewee's familiarity with CI term	
Interviewee's <i>functuarity with</i> Criteria	Yes
Competitive Intelligence definition:	Gathering info about competitors, internally as well as
competitive interligence definition.	externally, consolidate the whole info, structurally process
	this info to display it in a standardised form, analyse + draw
	conclusions, design reaction profiles
Terminology in respective company:	No special name for position
CI organization in company (organization	
Position of CI responsible:	Member of the market research department
Department:	Marketing/Market research
CI integration in company.	Part of marketing (market communications + market
Number of employees involved in CI:	research); one part of market research is CI 1 person, not fully dedicated to CI
CI Budget:	Market research budget
	Market Tesearch budget
CI data collection issues	
Type of collected information:	Strategies of competitors, product portfolio, turnover,
	strengths and weaknesses; market positioning, future
	developments; technical competence
Sources of information:	Press, public domains, internet (annual reports, products,
	etc.), news services, internally: used to be more intensive
	(employees who worked for competitors before)
CI process in respective company	
CI process in general:	Info is gathered and processed; main competitors are defined
	for each sector; One-pager from each competitor which is
	nearly up-to-date and contains most important info
Ad-hoc requests vs. annual plan:	Info on main competitors should be up-to-date; more
	extensive profiles for management on demand + ad-hoc work
Technical aid used:	MS Office; no specific software for gathering data; thinking
	about acquiring knowledge management software
Distribution of CI information:	Competitor profiles are available in a register but not through
	the intranet; info available on request only; used to have a
	newsletter "Competitive News" once a week (distributed to
	$1^{\text{st}} + 2^{\text{nd}}$ management level)
CI information receiver:	Strategic planning department is dependent on CI
Use of CI information:	Hard to follow up on development
Strategic vs. tactical use of CI	Used for both, hard to estimate proportion
information:	
Usefulness of CI	
Reasons for CI use/perceived usefulness	Needed for positioning own company on the; for acquiring
of CI:	customer orders, to know the strengths of the competition (to
	make a good offer); with lack of info faults happen;
	especially important for strategic purposes due to long-term
	planning
Measuring CI effectiveness/value:	Not measured; to measure ROI of CI would be very
	interesting, good for arguing in favor of CI
Role in company (perceived importance):	no high importance yet; not institutionalized yet

Contact Type: In-Depth-Interview Contact Date: 1<sup>st</sup> September 2006

Company characteristics	
Employees:	5.485
Annual turnover:	€ 1.976.000.000
Market standing:	Regional dominance
Industry:	Energy supply
Competitive intensity in industry:	Low-medium
Interviewee's familiarity with CI term	
Interviewee s <i>jumularly with</i> Criterin Interviewee has heard term before:	No
Competitive Intelligence definition:	Info about competitive landscape, competitor prices,
Competitive intemgence definition.	marketing, connections to foreign power suppliers, served
	customer segments customer segmentation, supply side
Terminology in respective company:	Marktbeobachtung, Markt- und Konkurrenzanalyse
CI organization in company (organization	
Position of CI responsible:	Market research, process- and data management
Department:	Market research
CI integration in company.	Done within market research for energy field
Number of employees involved in CI:	1 person (market research 50% + process- and data management 50%; out of market research 30% CI + 70%
	"normal" market research) + 10-15 employees (e.g., product
	manager) also watch competition a littlie bit
CI Budget:	
CI data collection issues	
Type of collected information:	Energy prices + quantities, competitive landscape, prices,
	marketing activities, links to foreign companies, served
	customer segments, customer segmentation, purchase site (supplier, quantities), financial development of competitors,
	possible mergers, switching customer info
Sources of information:	Call centre (info from customers about competitors), 10-15
	employees (e.g. product manager) also do some monitoring, a
	few employees are customers of the competition (direct
	mailing), internet, switching customer notes
CI process in respective company	
CI process in respective company	Once a week "jour fixes" with important departments, latest
	competitor info gets discussed
Ad-hoc requests vs. annual plan:	Mainly periodic work, sometimes ad-hoc assignments, main
1 1	part of ad-hoc requests from product management + sales
Technical aid used:	Internet, excel, no databases
Distribution of CI information:	Monthly reports (competitor activities), weekly "jour fixe"
	with sales manager + department heads (protocols distributed
	to all relevant persons), important news via e-mail to all
	department heads, CI not on intranet site but can be requested
CI information receiver:	CEO + product manager (monthly reports), department heads
Use of CI information:	Sometimes possible to see how info gets used (direct
	feedback)
Strategic vs. tactical use of CI	More info gathered for tactical use (e.g. price); strategic part
information:	lies mainly at strategic alliance headquarter
Usefulness of CI	
Reasons for CI use/perceived usefulness	To know the market; customers would switch, if you don't
of CI:	orientate yourself on the market and adjust accordingly
Measuring CI effectiveness/value:	Not measured and question is how to measure
Role in company (perceived importance):	It is important and it is implied that it gets done, but it is seen
	as daily business and everyone is used that this info is
	available, gets more important because the competition gets tighter

Contact Type: In-Depth-Interview Contact Date: 3<sup>rd</sup> September 2006

Company characteristics	
Employees:	9.973
Annual turnover:	€ 2.071.600.000
Market standing:	Regional dominance
Industry:	Energy supply
Competitive intensity in industry:	Low-medium
Interviewee's familiarity with CI term	
Interviewee has heard term before:	Yes, but knows only a little about it
Competitive Intelligence definition:	No concrete idea of CI term; associated with
	Mitbewerbsbeobachtung
Terminology in respective company:	Mitbewerbsbeobachtung
CI organization in company (organization	nal factors)
Position of CI responsible:	Senior product manager
Department:	Product management
CI integration in company.	
Number of employees involved in CI:	1 1/2 persons responsible for intranet page about competitors
	+ 1 person responsible for price comparison calculator
CI Budget:	
CI data collection issues	
Type of collected information:	price, campaigns (check of legitimacy), contract documents
	(check of legitimacy), products, internet services, won + lost
	customers, distribution channels, sales operations
Sources of information:	Other departments, press review, annual reports, internet,
	colleagues at events, employees as competitors dummy-
	customers, mystery calls
<i>CI process in respective company</i> CI process in general:	Two directions: 1. market research gathers info about
Ci process in general.	competitors from customers or directly from market 2.
	continuous monitoring + collection & concentration of
	information from different channels within company; info
	sent via e-mail/fax to product management for analysis
Ad-hoc requests vs. annual plan:	Monthly update of price comparison calculator; yearly
The new requests (of annual prain	strategic analysis (rough competition overview); ad-hoc
	requests: e.g. development of competitors prices
Technical aid used:	
Distribution of CI information:	Intranet platform, important news get sometimes passed on
	via phone or E-Mail, yearly competitor overview only
	available for a few people
CI information receiver:	Management board, product manager
Use of CI information:	Decisions about prices supported by situation analysis of
	competition, traceable how many people look at CI intranet
	section
Strategic vs. tactical use of CI	
information:	
Usefulness of CI	
Reasons for CI use/perceived usefulness	A must due to liberalization of electricity and natural gas
of CI:	markets; minimization of risks; decisions would not be made
	in uncertainty
Measuring CI effectiveness/value:	Does not know how to measure; example price-elasticity
0	measurement, without benefit measurement it is harder to
	justify additional CI staff
Role in company (perceived importance):	Significance did certainly rise; CI intranet section is very
	popular

Contact Type: In-Depth-Interview Contact Date: 13<sup>th</sup> September 2006

Company characteristics	
Employees:	1.133
Annual turnover:	
Market standing:	One of the few market leaders/dominating
Industry:	Banking industry
Competitive intensity in industry:	Medium (customers willingness to change bank is low)
Interviewee's familiarity with CI term	
Interviewee's <i>jumularly win</i> Criefin	Yes
Competitive Intelligence definition:	To track trends in the competition & monitor services of the
Competitive interligence definition.	competitors with the help of different instruments and to
	accordingly draw conclusions for the yearly marketing plans
Terminology in respective company:	No special terminology used
<i>CI organization in company (organization</i> Position of the CI responsible:	Head of marketing department
Department:	Marketing
CI integration in company.	Market research (in-house service provider) integrated in
er integration in company.	Marketing department; part of CI is done in Controlling (key
	performance indicator + financial statement analysis of other
	banks); no separated CI division, most CI work is done in
	Marketing but without a dedicated person
Number of employees involved in CI:	No special CI person
CI Budget:	
CI data collection issues	
Type of collected information:	Services, prices & conditions, products, key performance
	indicators, market shares, positioning, how are standards
	lived, locations of competitors
Sources of information:	Mystery shopping, classic market research, sales units, job
	applicants from other banks, Learning journeys in other
	industries, controlling, new employees,
	Finanzmarktdatenservice, contact persons in other companies,
	internet, product management, market research companies
CI process in respective company	
CI process in general:	analysis in marketing department (always together with sales
	staff); combination of FMDS-data analysis & mystery
	shopping; reports about several competitors; market analysis
	for individual branches
Ad-hoc requests vs. annual plan:	70% ad-hoc work + 30% self-interest; yearly marketing
	planning; monthly update of price analysis, regularly product-
Technical aid used:	specific updates via internet through product manager
Distribution of CI information:	Presentations; monthly newsletter does not exist any longer;
Distroution of Cr miormaton.	intranet; half an hour of monthly board meeting on CI
CI information receiver:	Management + individual banks
Use of CI information:	In the case of commission work, also the implementation is
	conducted
Strategic vs. tactical use of CI	strategic implications prevail but also used tactically (e.g.
information:	price)
Usefulness of CI	
Reasons for CI use/perceived usefulness	you always have to compare yourself with the competition;
of CI:	upfront as a guidance & afterwards for comparison
Measuring CI effectiveness/value:	Value not measured but seen and lived
Role in company (perceived importance):	Established but not fully developed yet
	· · · · · · · · ·

Contact Type: In-Depth-Interview Contact Date: 3<sup>rd</sup> November 2007

Company characteristics		
Employees:	2100	
Annual turnover:	€ 191.000.000	
Market standing:	Market leader in one sector, established in another sector	
Industry:	Sporting goods	
Competitive intensity in industry:	High	
* *		
Interviewee's familiarity with CI term	$\mathbf{X} = (1 + 1) + (1 + 1)$	
Interviewee has heard term before:	Yes (but not known in detail)	
Competitive Intelligence definition:	CI means to watch competitors more closely and to screen them	
Terminology in respective company:	Wettbewerbsanalyse	
CI organization in company (organization		
Position of the CI responsible:	Market and trend research manager	
Department:		
	Marketing CI is done within market research + in different other	
CI integration in company.		
	departments (e.g. product management – technical features of competitors products, finance – financial reports of	
	competitors products, finance – financial reports of competitors)	
Number of employees involved in CI:	1 person in per sector	
CI Budget:	i person in per sector	
CI Budgel:		
CI data collection issues		
Type of collected information:	turnover, number of sold pieces, co-operations, alliances,	
	developments, products, financial statements; whole	
	competition gets monitored	
Sources of information:	internet, newsletter from info provider (bi-weekly), press,	
	products get swapped between competitors, industry contacts	
	of management board, annual reports	
CI process in respective company		
CI process in general:	Development over the years of individual competitors can be	
	viewed in database; small part of market research is CI, not	
	really an analysis but simply an observation	
Ad-hoc requests vs. annual plan:	CI done on special occasions)not regularly, database gets	
	filled regularly	
Technical aid used:	Database	
Distribution of CI information:	Database but not available through intranet, certain group	
	(marketing, board of directors) has access; once a month	
	"Trendtelegramm"-newsletter (sometimes includes CI)	
CI information receiver:	Only a few people (within marketing + management board)	
Use of CI information:	Alpine leadership team looks at reports	
Strategic vs. tactical use of CI	Within market research it's more strategic, tactical CI mainly	
information:	gathered by product management (e.g. prices)	
Usefulness of CI		
Reasons for CI use/perceived usefulness	Ski sales figures needed for calculating own market share +	
of CI:	for setting goals for the next year; CI used by management	
	board when making strategic decisions	
Measuring CI effectiveness/value:	Not measured (not possible to measure); harder to justify CI	
Role in company (perceived importance):	CI is by-product, no core thing on which focus lies;	
(percerved importance).	discussion going on whether CI makes sense at all -> firm	
	wants to set trends and not follow competition	
	wants to set trends and not renow competition	

Contact Type: In-Depth-Interview Contact Date: 6<sup>th</sup> December 2006

Company characteristics	
Employees:	2.600
Annual turnover:	€ 1.150.000.000
Market standing:	Established
Industry:	Pharmaceutical industry/generics
Competitive intensity in industry:	Medium
Interviewee's familiarity with CI term	
Interviewee s <i>junitarity with Criterin</i> Interviewee has heard term before:	Yes
Competitive Intelligence definition:	Know as much as possible about competition with help of
competitive interrigence definition.	soft facts (e.g. personal contacts) and hard facts (e.g. IMS-
	Data)
Terminology in respective company:	No special term
CI organization in company (organization	
Position of the CI responsible:	
Department:	
CI integration in company.	Department split up in 3 fields (supply chain, market access,
er megraden meenpanyt	reimbursement); market access is done by 2 employees, 1 of
	them is responsible for IMS-data evaluation, which has
	closest link to CI
Number of employees involved in CI:	2 (IMS-data evaluation employee + department head for
~ ·	analysis + qualitative work)
CI Budget:	qualitative part of CI is not budgeted; quantitative part (IMS-
	data evaluation) is budgeted (license + manpower)
CI data collection issues	
Type of collected information:	products in pipeline, quantitative drug prescription data,
J r	competitors' promotion folder and training material
Sources of information:	Personal contacts, twice a day press clippings, IMS-data,
	pharmaceutical admissions database, colleagues (e.g. field
	staff), several physicians of trust collect info
CI process in respective company	
CI process in general:	IMS-data: competitors are used for comparison; department
F @	head reads press clippings + taps network; other departments
	not involved in a standardized way (just-by-chance)
Ad-hoc requests vs. annual plan:	Requests from other departments are rare; standardized plan
* *	according to monthly report transmission deadlines
Technical aid used:	
Distribution of CI information:	IMS-data reports include comparison with competitors and
	are sent via e-mail; internal report is also presented; within
	the management meetings the competitor info gets presented
CI information receiver:	Country head, 3 business unit heads, CEO + head of finance
Use of CI information:	Future products pricing forecasts depend on estimation how
	many competitors enter the market, CI does not influence
	launch decisions but influences the forecast + planning
Strategic vs. tactical use of CI	CI is mainly used strategically (e.g. info about merger of
information:	competitor); pricing is more tactically
Usefulness of CI	
Reasons for CI use/perceived usefulness	Human curiosity, CI influences planning & pricing; CI not
of CI:	very important due to regulated market (entry + exit barriers)
	no short-term effects, however long-term effects without CI
Measuring CI effectiveness/value:	Not measured in absolute numbers (hard to measure because
	of multi factorial events + info would not have additional
	value); measured in appreciation
Role in company (perceived importance):	Seen as very important + highly appreciated

Contact Type: In-Depth-Interview Contact Date: 13<sup>th</sup> December 2006

Company characteristics		
Employees:	2.829	
Annual turnover:	€ 412.100.000	
Market standing:	Established	
Industry:	Pharmaceutical industry & biotechnology	
Competitive intensity in industry:	Medium	
Interviewee's familiarity with CI term		
Interviewee sjandardy with Criteria Interviewee has heard term before:	Yes	
Competitive Intelligence definition:	The whole competitive environment (market situation + main	
Competitive interligence definition.	competitors) is monitored	
Terminology in respective company:	Competitive Intelligence	
<i>CI organization in company (organization</i> Position of the CI responsible:	Project Manager Marketing	
Department:	Sales & Marketing (Vaccines Europe)	
CI integration in company.	Part of market research, which is part of marketing & product	
CI integration in company.		
	management; each product group has own marketing department	
Number of employees involved in CI:	1 market research person per product group (10-15% of	
rumber of employees involved in CI:	market research person per product group (10-15% of market research time dedicated to CI)	
CI Budget:	Market research budget is part of marketing budget; no	
	special CI budget; product manager decides how much is	
	spectal of budget, product manager decides now much is spent on market research	
	spont on market research	
CI data collection issues		
Type of collected information:	Competitors' $R&D + clinical studies$ , products on the market,	
	competitors' strategy, financial situation, possible mergers	
Sources of information:	Internet, congresses, finance dept., R&D dept., cooperation	
	with agencies (e.g. in-depth interviews), industry newsletter, IMS-data on regional level	
CI process in respective company		
CI process in general:	Gather (internet research, research at congresses, finance	
	updates, R&D-updates) + analyze info	
Ad-hoc requests vs. annual plan:	Theoretical annual plan + information need that suddenly	
	occurs, rather no requests from other departments, continuous	
Technical aid used:	monitoring	
Distribution of CI information:	Data collected within Excel-spreadsheet (always up-to-date)	
Distribution of CI information:	Update e-mails to certain persons, external partner projects end with presentation, CI intranet site (restricted user)	
CI information receiver:	Everyone who is involved in the products, project	
	management, R&D, clinic and regulatory stuff	
Use of CI information:	Strategic decisions are always made with the competitive	
	background knowledge in mind	
Strategic vs. tactical use of CI	70% strategic (on the long run, regarding launch plans or	
information:	R&D programs) + 30% tactical relevance (how competitors	
	are acting locally)	
Usefulness of CI		
Usefulness of CI	Absolutaly pagassary to know how compatitors are acting	
Reasons for CI use/perceived usefulness of CI:	Absolutely necessary to know how competitors are acting and where market is going; CI is foundation of right	
	marketing mix	
Measuring CI effectiveness/value:	Not possible to measure effectiveness of CI (the whole	
wiedsuring of encenveness/value.	marketing mix influences sales figures); only possible to	
	marketing mix minuclices sales rightes), only possible to measure costs	
Role in company (perceived importance):	Important part of industry; CI has high significance and is	
reste in company (percerved importance).	regularly used by other departments; sometimes seen as a by-	
	product; gains in importance due to fiercer competition	
	reserve, game in importance due to fiereer competition	

Contact Type: In-Depth-Interview Contact Date: 20<sup>th</sup> December 2006

Company characteristics		
Employees:	12.893	
Annual turnover:	€ 3.383.500.000	
Market standing:	One of the few market leaders/well established	
Industry:	Insurance and financial service provider	
Competitive intensity in industry:	Medium	
* * *		
Interviewee's familiarity with CI term		
Interviewee has heard term before:	No	
Competitive Intelligence definition:	Monitor market (regarding market itself + products), e.g.	
	development of competitors regarding market shares (+	
	changes), potential premium (+ changes), products, etc.	
Terminology in respective company:	Mitbewerbsbeobachtung, Wettbewerbsbeobachtung	
CI organization in company (organization	nal factors)	
Position of the CI responsible:	Marketing research	
Department:	Corporate Marketing	
CI integration in company.	Part of market research (in-house service provider); some CI	
	work is done by product management (also within marketing)	
Number of employees involved in CI:	1 person in market research (20% of time dedicated to CI	
	work) + in each division 1 product manager (however within	
	product management it is not a highly standardized process)	
CI Budget:	No special CI budget, part of market research budget	
CI data collection issues		
Type of collected information:	Mainly national data (except for products); focus on closest	
Type of conceted information.	competitors; product information, changes in market shares	
	and potential premium, marketing activities	
Sources of information:	Internet, mystery shopping (external agencies or students),	
	advertising data bought, employees, multi-client-studies	
CI maaaan in namaatina aammann		
CI process in respective company	Continuous advertising manitoring ad has maduat	
CI process in general:	Continuous advertising monitoring, ad-hoc product monitoring; no dedicated position in other departments but	
	some CI work is done whenever competitor or oneself	
	launches new product	
Ad-hoc requests vs. annual plan:	Continuous advertising monitoring: ad spending figures	
Au-noe requests vs. annuar pran.	received monthly + motifs up-to-date + annual report;	
	regarding products: ad-hoc research (requests from product	
	management or PR)	
Technical aid used:		
Distribution of CI information:	Intranet database regarding competitors' communication;	
	product research ends with a presentation & report via e-mail;	
	CI info within marketing & sales newsletter	
CI information receiver:	Product management, divisions	
Use of CI information:	CI influences smaller decisions + product modifications	
Strategic vs. tactical use of CI	Mainly used for tactical fine tuning (e.g. products), however	
information:	also used strategically (e.g. for communication planning)	
Usafulnass of CI	· · · · · · · · · · · · · · · · · · ·	
	Batter reacting to market conditions (a.g. better product	
-		
01 (1.		
Measuring CL effectiveness/value:		
measuring er erreen venessi value.		
Role in company (perceived importance):		
NOIS IN COMPANY OFFICEIVED IMPORTANCE.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Kole in company (perceived importance):	product management; not becoming more important due to	
Usefulness of CI Reasons for CI use/perceived usefulness of CI: Measuring CI effectiveness/value:	Better reacting to market conditions (e.g. better product positioning, enhanced communication); no huge disadvantag without CI but negative effects on the fine tuning Not measured at all (problem: totally integrated in market research and therefore hard to separate) and not possible to measure; no problem to justify CI as it is only a by-product Not communicated greatly; by-product of market research &	

Contact Type: In-Depth-Interview Contact Date: 25<sup>th</sup> April 2007

Company characteristics	1.000
Employees:	1.296
Annual turnover:	€ 683.800.000
Market standing:	Not dominating
Industry:	Insurance
Competitive intensity in industry:	Medium
Interviewee's familiarity with CI term	
Interviewee has heard term before:	No
Competitive Intelligence definition:	Monitoring and observing the competitors
Terminology in respective company:	Umbrella term "Marktforschung"
	· ÷
<i>CI organization in company (organization</i> Position of the CI responsible:	Corporate communications & market research
Department:	Market research (staff unit within general secretariat)
CI integration in company.	Done by market research and product management/marketing
CI integration in company.	(rather actuarial details, e.g. tariffs); strategic case-scenarios
	are played through within the corporate office
Number of employees involved in CI:	Within market research: 1 person (70% corporate
runder of employees involved in CI.	communications and 30% market research -> out of market
	research time only 5% dedicated to CI) within product
	management: 3 persons (gather CI info occasionally)
CI Budget:	
CI data collection issues	
Type of collected information:	Mainly national; products, product performance, market
	figures, market share comparison, tariffs, premium developments
Sources of information:	Database of Versicherungsverband Österreich (market data,
Sources of information.	e.g. market share statistics), mystery shopping (occasionally
	by employees + partner companies); daily press clippings,
	internet, field staff
	,
CI process in respective company	Conditation with moderation dependences
CI process in general:	Coordination with marketing department
Ad-hoc requests vs. annual plan:	Premium developments monitored monthly or at least quarterly; competitors' products only observed occasionally;
	occasional requests from product development
Technical aid used:	occasional requests from product development
Distribution of CI information:	Market research + product management interchange
	competitor information; distribution depends on topic (reports
	on important topics distributed via intranet); product
	comparisons sent to board of directors and marketing
CI information receiver:	Marketing & advertising department + board of directors
Use of CI information:	Important for product development and product
	improvements; market research employee also gives
	recommendations for action
Strategic vs. tactical use of CI	Used for both; perhaps more strategically
information:	
Usafulnass of CI	
Usefulness of CI Reasons for CI use/perceived usefulness	To know ones standing and to compare with the competitors;
of CI:	basis for argumentation for field staff; product
	improvements; without CI one would not know where to start
Measuring CI effectiveness/value:	Improvements, without of one would not know where to start Impossible to measure; if it would be possible to measure, it
incusaring of offeed veness, value.	would be a question of cost
Role in company (perceived importance):	CI is needed; could be more accepted; taken for granted ->
	by-product; nobody wants to spend more money on CI
L	· · · · · · · · · · · · · · · · · · ·

# C: Terminology used for CI activities in respective companies (Matrix with respondents' IDs)

	Intelligence	-analyse	-beobachtung	-forschung (research)	development
Competitive	1, 13				
Marketing	2				
Konkurrenz		4, 5, 8	4		
Markt (Market)		4, 8	4, 5, 8	3, 15	3
Mitbewerbs		5	9, 14		
Wettbewerbs		11	14		

## D: Type of collected information (detailed list)

(with respondents' IDs in brackets)

	product portfolio (1,3, 7)	services (10)	product treatment (6)
	product information (2, 14)	internet services (9)	production sites (7)
products &	products (9, 10, 11, 13, 15)	customer service (1)	material construction (6)
services	products in pipeline (12)	lived standards (10)	technical competence (7)
Ser vices	side offers (9)		research areas (13)
	product performance (15)		current clinical studies (13)
	packaging (6)		
	prices(3, 5, 6 (price range),		
	8, 9, 10 (official +		
prices &	unofficial))		
conditions	premium developments (14, 15)		
	conditions (4, 10)		
	date of price changes (9)		
	date of price changes (9)		
positioning	positioning (2, 4, 7, 10)		
positioning	positioning (2, 4, 7, 10)	l	
	marketing activities (8, 14)	advertising research (4)	image (4)
	campaigns - check of	<u> </u>	
	legitimacy (9)	advertising motifs (5, 6, 14)	customer segmentation (8)
marketing			communication strategy
	promotion folder (12)	advertising budgets (5)	(14)
	training material (12)		CRM (1)
	retail coops (6)		
		-	
PR	press watch (4)		
	performance (3)		
	key performance indicators/		
	key figures (1, 2, 10)		
financial	turnover (7, 11)		
data	annual reports/financial		
	statements (5, 10, 11)		
	financial situation (13)		
	financial development (8)		
	earnings trend (7)		
	market figures (15)		
	bestseller (6)		
sales figures	(sold) quantities (8, 11)		
	drug prescription data (12)		
	unug presemption uata (12)	l	
	atondond montrat available		
market	market shares/customer		
	shares (4 10 (+ product		
figures	shares (4, 10 (+ product usage), 14, 15)		
figures	shares (4, 10 (+ product usage), 14, 15) customer switch info (5, 8,		
market	standard market evaluation (4) market shares/customer		

distribution & sales	distribution channels (9)
	distribution strategies (14)
	served customer segments
	(8)
	sales operations (9)
	locations (10)
	possible mergers (8, 13)
alliances,	co-operations & alliances
mergers &	(11)
co-operations	links to foreign companies
	(8)
strategies	strategies (7, 13)
trends	(market) trends (2, 10)
developments	opportunities (1)
&	(future) developments (7,
opportunities	(11)
	,
	contract documents - check
contracts	of legitimacy (9)
internal	
processes	internal processes (1)
	L]
supply side	suppliers & quantities (8)
Sarpij Side	(0)
strengths &	
weaknesses	strengths & weaknesses (7)
weariesses	1
	I
competitive	competitive landscape (8)
landscape	competitive landscape (8)
landscape	competitive landscape (8)
	competitive landscape (8) whole environment (2)

## E: CI information sources (detailed list)

(with respondents' IDs in brackets)

official authorities & industry unions	regulatory authority (1, 5)
	Finanzmarktdatenservice (10)
	IMS-data (12, 13)
	Versicherungsverband Österreich (15)
	European union of energy providers (5)
	pharmaceutical product admission database (12)
	media (1)
	press (6, 7, 9, 11, 12, 15)
press	magazines (6)
	newspapers (6, 9 (industry))
	internet (1, 2, 7, 8, 9, 10, 11, 13, 14, 15)
	company homepages (6)
	public domains (7)
	newsgroups (1)
internet	newsletter (7, 9, 11, 13 (industry))
	databases (1)
	APA-Online Manager (5)
	alliance intranet (8)
[	annual reports (7, 9, 11)
annual reports	financial figures (9)
	Indicial figures ()
[	press conferences (1)
public events	trade fairs (6)
public events	congresses (13)
[	mystery calls - hotlines (1, 9)
mystery calls/shopping	mystery shopping (1, 10 (standardized), 14, 15)
[	sales/field staff (3, 4, 6, 9, 10, 12, 15)
	customer consultant -business clients (5)
	general agents (6)
	colleagues (9, 12, 14)
	other departments (3, 8, 9)
	controlling (10)
	finance (13)
(prospective) employees	R&D department (13)
	product management (8, 10)
	employees who used to work for competitors before (7)
	new employees (10)
	job applicants from competitors (10)
	employees are dummy customers of competitors (8, 9)
l	competitors' products tested by employees (6)
[	informal nativork (1)
	informal network (1)
	contact persons at competitors (10, 12)
network	industry contacts of management (11, 12)
	products get swapped between competitors (11)
	physicians of trust (12) learning journeys in other industries (10)

information provider	information provider (1 (direct mailings), 3 (e.g. market research), 5 (advertising data), 11, 13, 14 (advertising data)) market research agencies (2, 10) multi-client studies (14)
customers switching customer surveys (5, 8) customers (6, 8 (call center))	

## F: CI process stages (detailed list)

(with respondents' IDs in brackets)

	information gathering/collection (1, 2, 3, 4, 6, 7, 9, 10, 12,
	13, 14)
	purchase information (2)
	mystery shopping (10)
information gathering	monitoring/observation (9, 11, 15 (little))
	market research gathers competitor data directly from the
	market (9)
	main competitors for each sector/market get defined and
	focused on $(6, 7)$
data processing	info gets processed (7)
data processing	concentration of info (9)
	analysis (1, 2, 4, 5 (price), 9, 10, 13)
	valuation date/analysis four times a year (6)
	Detection of new markets/possible destinations (3)
analysis	benchmarking/comparison with competitors (2, 4, 12)
	find out about competitors actions (3, 4 (computer
	simulation))
	not really an analysis (11)
actions	develop counter tactics (3)
	CI report about several competitors (1 (daily), 5 (once a
	year), 7 (daily), 10, 12)
	distribute findings (2, 3 (feed database), 14)
reporting	facilitate/assist knowledge- and information transfer (2)
• •	once a week jour-fixes with other departments (8)
	development of competitors over the years can be viewed in
	database (11)

# G: Structural driving forces behind CI activities (detailed list) (with respondents' IDs in brackets)

planned	annual study plan/work program (2, 3, 13 (theoretically))
	standard market research (4)
	Analysis four times a year (6)
	mainly periodic work (8)
	monthly price analysis/comparison (9, 10)
	standardized plan according to monthly report deadlines
	(12) cause related research integrated in the yearly plan (4)
	yearly strategic analysis (9)
	yearly marketing planning (10)
	continuous monitoring of daily business (1, 13, 14
	(advertising), 15 (monthly))
continuously	regular, not standardized price watch (5)
continuously	continuously data collection (6, 7 (up-to-date on main
	competitors))
	database filled regularly (11)
	ad-hoc requests exist but not major focus (1)
	ad-hoc requests/studies/research/on demand work (2, 3
ad-hoc	(very often), 4, 5 (a lot), 7, 8 (sometimes), 9, 10, 12 (rare),
	14, 15(rare))
	70% on demand work, 30% self interest (10)

# H: Perceived CI benefits/reasons for CI use (detailed list) (with respondents' IDs in brackets)

general	CI-activities never useless (6)			
competitive advantage	competitive advantage - not quantifiable (1)			
turnover	direct turnover increase - not quantifiable (1)			
	cost savings - normally product managers do this work (1)			
efficiency increase	time savings - normally product managers do this work (1)			
	efficiency (5)			
	useful for the decision making (2)			
	without, this info a decision would not be made due to			
	uncertainty - due diligence (9)			
assists decision making process	makes decision making process faster (3)			
	higher quality of decisions (3, 4, 5 (depends on the info			
	quality))			
L	1 · ···			
	no surprises (3)			
risk reduction	minimization of risks (4, 7 (strategic + tactical), 9 (e.g. loss			
	of market share))			
	price orientation (5 (obligatory), 6 (know where competition			
prices	stands), 12 (influences pricing))			
	external view of your company (2)			
	avoid to be seen wrongly in public (9)			
own market position	be able to judge own market position (6, 15)			
	sales figures to calculate own market share + set goals for			
	the next year (11)			
	be able to position own company on the market (7)			
	benchmarking/compare with competition (2 (very			
	important), 10 (upfront as a guidance), 15)			
	to know strengths + weaknesses of the competitors (4 (for			
benchmarking/strengths + weaknesses	developing strategies), 7 (for making good offers))			
of competition	to know how competitors are acting (13)			
	if you don't orientate yourself at the market and adjust,			
	customers might switch (8)			
	to know the market and where it is going (5, 7, 8, 10, 13)			
	better react to market conditions (14)			
market knowledge	a must, due to liberalization of electricity and natural gas $market$ (0)			
	markets (9)			
<u> </u>	faster reaction due to better knowledge(3)			
	product improvements (6, 15)			
products	product improvements (6, 15) right placement of products (5)			
	ingit procentent of products (5)			
	CI influences the planning (12)			
planning	CI is the foundation to develop the right marketing mix (13)			
	CI is the roundation to develop the right marketing fillx (15)			

argumentation	basis of argumentation for field staff (6, 15)
	especially important in the long run (4, 7 (strategic
long-run/strategic	purposes/long-term planning), 12 (no short-term effects)
	making strategic decisions (11)

#### I: German Abstract

Um wettbewerbsfähig zu bleiben ist es für ein Unternehmen, in den heutigen hochkompetitiven freien Marktwirtschaften, extrem wichtig geworden seine Konkurrenten genauestens zu kennen. Eine immer beliebter werdende Unternehmenspraxis welche hier eingreift, indem sie hilft das wettbewerbliche Umfeld eines Unternehmens zu beobachten, ist Competitive Intelligence (CI). CI scheint besonders in den USA sowie in großen asiatischen und europäischen Wirtschaften, wie etwa China, Japan, Frankreich und Deutschland, beliebt zu sein. Obwohl länderspezifische CI Studien in den zuvor genannten Ländern ziemlich umfangreich verfügbar sind, existiert kaum Literatur hinsichtlich solcher Aktivitäten in Ländern in denen CI noch nicht so weit verbreitet und entwickelt ist.

Diese Diplomarbeit versucht diese Lücke in der vorhandenen Literatur zu schließen, indem die CI-Praktiken von Unternehmen eines kleinen europäischen Landes, nämlich Österreich, untersucht werden. Dies geschieht mithilfe der (a) Entwicklung einer CI Definition, welche auf einer umfangreichen Literaturübersicht basiert sowie durch die (b) Durchführung einer explorativen Untersuchung hinsichtlich der CI Aktivitäten von 15 österreichischen Unternehmen.

Basierend auf der Literaturrecherche wird, im Rahmen dieser Diplomarbeit, CI wie folgt definiert:

"Als Prozess kann CI als die kontinuierliche, systematische, legale und ethische Art und Weise in der ein Unternehmen seine interne sowie externe Umwelt, und hierbei im Speziellen die kompetitiven Aspekte, scannt, öffentlich verfügbare Informationen sammelt und analysiert, und im letzten Schritt diese weiterverarbeitete Information benutzt um die operative sowie strategische Entscheidungsfindung zu unterstützen, definiert werden. CI als Produkt kann als das finale Endergebnis des gesamten CI Prozesses definiert werden. Somit kann CI auch als die mit Informationen untermauerte Grundlage, welche Manager bei deren Entscheidungsfindung unterstützt, bezeichnet werden."

Im Rahmen der Untersuchung von Themen wie der Vertrautheit der österreichischen CI Fachleute mit dem CI Begriff, dem organisatorischen CI Setup (z.B. für CI verantwortliche Abteilungen, Anzahl der CI Mitarbeiter, CI Budget, usw.) und dem CI Prozessablauf (z.B. CI Prozessstufen, Weitergabe von CI, usw.), wurde die unerfahrene Herangehensweise an CI in österreichischen Unternehmen offenbart. Dies mag zum Teil sicherlich in der Neuheit des Themas begründet sein.

Die anfängliche Literaturrecherche hat zudem eine weitere Lücke in der vorhandenen CI Literatur zum Vorschein gebracht, wobei diese Diplomarbeit einen Teil dazu beitragen soll, diese zu schließen. Hierbei handelt es sich um das Thema CI Wertbestimmung. In der aktuellen akademischen Literatur wurden bereits einige weniger erfolgreiche Versuche unternommen um diese Lücke zu schließen. Deshalb müssen CI Fachkräfte weiterhin mit der Herausforderung leben, ihre Arbeit zu rechtfertigen ohne die Möglichkeit zu haben das Endresultat ihrer Tätigkeit quantifizieren zu können. Das Thema der CI Wertbestimmung sowie verwandte Themen wurden deshalb ebenso, sowohl im Rahmen der Literaturübersicht als auch in der empirischen Studie beleuchtet.

Appendices

#### J: English Abstract

In today's strongly competitive free market economies, in order to succeed, it has become extremely important for a company to know its competitors. An increasingly popular company practice that steps in here, by helping monitor the competitive environment of a company, is Competitive Intelligence (CI). CI seems to be especially popular in the USA and in big Asian and European economies such as China, Japan, France and Germany. While country-specific CI studies investigating the CI practices in the aforementioned countries are currently rather extensively available, hardly any literature regarding such activities in less CI-sophisticated countries exists.

This diploma thesis attempts to address this gap in the existing literature by studying the CI practices within the companies of a small European country, namely Austria. This is done by (a) developing a definition of CI based on a comprehensive literature review and (b) conducting an explorative research on CI, carried out in 15 Austrian companies.

Based on the literature review, CI is defined as follows:

"As a process CI can be defined as the continuous, systematic, legal and ethical way in which a company scans its internal and external environment, and here especially the competitive aspects of the firm's environment, gathers and analyzes publicly available information and in a last step uses this processed information to aid operative and strategic decision-making. When thinking of CI as a product, CI can be defined as the final outcome of the whole CI process and therefore CI is also the informed foundation which supports managers in their decision-making."

While looking at topics such as the Austrian CI practitioners' familiarity with the CI term, the organizational CI setup (e.g. departments responsible for CI, number of CI employees, CI budget, etc.) and the CI process flow (e.g. CI process stages, dissemination of CI, etc.), it was revealed that CI in Austria is approached in a rather unsophisticated way partly due to its novelty.

Additionally, the initial literature review yielded another gap in the existing literature that this study wants to close, namely the topic of CI value measurement. In the current academic literature a few attempts were made to fill this gap but without any considerable success. Hence, CI practitioners still have to deal with the challenge of

justifying their work without being able to measure the outcomes of CI. CI value measurement and related topics were therefore also looked into both in the course of the literature review and in the course of the empirical study.

### K: German Curriculum Vitae

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