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Title:
The challenges of a business analysis in the growing complexity of corporate structure

Date of submission: 09 February 2015

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Course of Studies:
Foreign Trade/ International Management (Bachelor)
Abstract

Organizational structures are growing complex while the business responds to volatile customer needs and changes in the global environment. When a company integrates its most important suppliers and customers and cooperates with its competitor, interdependencies between business units blur and end-customer are hard to identify. This is not only a challenge for employees and management. The business analysis is affected strongly, as the organizational network expands globally, information gathering grows complex. Business analysts are depending on the information the employees are providing them, in order to evaluate stakeholder requirements and prepare changes. Thus, in complex organizational structures, the analyst has to search relevant information in a knowledge management system. Even a well-established knowledge management will not be able to provide full information. Therefore, the analyst will be down to communication with knowledge owners to gather deeper insights on change requirements. Still, the communication success depends on the relationship the analyst may establish with the knowledge owner. Only in a trustworthy relationship sensitive knowledge will be shared. This paper argues that the success of a business analysis in the complex organizational structure depends on the knowledge management system in use, the degree of internal corporate communication, and the ability to establish trust to employees. All three factors together are needed to execute changes effectively and efficiently in the fast changing corporate environment.

Keywords: organizational structure, business analysis, knowledge management, communication, trust

JEL classification: D83, L22, L23, M14, O22, O32
I. **Table of Content**

1. Table of Content .................................................................................................................. I
2. List of Figures ....................................................................................................................... II
3. List of Tables ........................................................................................................................ II
4. List of Abbreviations ............................................................................................................ II

1. Introduction ......................................................................................................................... 1
2. Drivers of changes in corporate structure ............................................................................ 2
   2.1 Drivers of complexity in corporations ............................................................................. 2
   2.2 Division of labour ............................................................................................................ 4
   2.3 Need for coordination in complex corporate structure .................................................. 6
3. Business analysis ................................................................................................................... 8
   3.1 Definition and execution of business analysis ................................................................. 8
   3.2 Reasons for a business analysis ...................................................................................... 10
   3.3 Role of the business analyst .......................................................................................... 12
   3.4 Tasks of the business analyst ......................................................................................... 14
   3.5 Requirements on and challenges of the business analyst .............................................. 17
   3.6 Changing context of business analysis .......................................................................... 21
4. Understanding the company and work processes ................................................................. 23
   4.1 Analysis of the knowledge management system ........................................................... 26
      4.1.1 Definition of knowledge management .................................................................... 27
      4.1.2 Role of knowledge management in business analysis ............................................ 29
      4.1.3 Barriers to effective knowledge management and approaches to overcome them .... 32
   4.2 The role of communication in carrying out a business analysis ...................................... 36
      4.2.1 Definition and evaluation of corporate communication ........................................... 37
      4.2.2 Internal corporate communication .......................................................................... 40
   4.3 Definition of trust in professional context ....................................................................... 44
      4.3.1 The role of trust in knowledge sharing .................................................................... 46
      4.3.2 Establish and manage trust as a business analyst ..................................................... 49
5. Success factors on initializing a business analysis ................................................................. 56
6. Conclusion ............................................................................................................................ 58

V. List of References .................................................................................................................. 61

VI. Declaration of Originality .................................................................................................... III

VII. Confidentiality Clause ....................................................................................................... III
II. List of Figures
Graph 1: Establishing Trust .................................................................53

III. List of Tables
Table 1: Tasks of the BA ........................................................................15
Table 2: Requirements of the BA .............................................................18

IV. List of Abbreviations
BABOK business analysis body of knowledge
EDP electronic data processing
IT information technology
ICT information and communication technology
KMS knowledge management system
SWOT strengths, weaknesses, opportunities and threats
1 Introduction

Global competition is forcing companies to design their value chains according to the best market conditions. This leads to specialization on an international level creating new, complex company structures through advanced division of labour. The increasing number of conglomerates, integrating various companies along the supply chain, is forming multi-national players. These organizational constructs require close coordination and communication to manage and optimize the corporate processes which is essential to maintain the competitive advantage. The drivers of specialization and complexity are strongly influencing the corporate structure. In the fast changing environment\(^1\) and complex value chains, managers struggle to predict the reach of consequences their strategic planning might have. To cope with this challenge, a business analysis is often considered as a helpful tool to respond to changes and implement or adjust corporate processes and manage the growing complexity of companies’ structures. Anyhow, when the structure of a company and the value chain are gaining complexity, the execution of a successful analysis is growing intricate and requires more resources.

This paper investigates the business analysis in order to draw attention of company management to challenges coming up in a complex corporate structure. By understanding the drivers of a successful business analysis, management will be able to create preconditions in the company which can speed up and facilitate the work of a business analyst. Having the prerequisites established in the whole corporation, the analyst will be able to provide management with complete and crucial information at the moment of decision-making and prepares and supports the implementation of changes.

To begin with the analysis of critical success factors in the first phase, the drivers of specialization and complex global enterprises will be discussed in Chapter 2. In order to enable managers to understand what a business analysis is, why it can be beneficial nowadays and how it is carried out, these ideas will be described as a starting point. Before management is hiring a business analyst, the role and tasks a business analyst is performing and what skills and abilities are required to succeed in the changing environment needs to be considered. This information will be provided in Chapter 3. As the outcome of an analysis depends on the information and knowledge available. Challenges which can occur while searching knowledge with a knowledge management

\(^1\) The environment of a company is defined in this paper according to the dimensions of Porters Five Forces model, which includes the dimensions of substitute products, new market entrants, customers, suppliers and competition (Porter, 1980, p. 31) with its current trends.
system (KMS) or by communicating with employees and management will be discussed in Chapter 4. By analysing the management of knowledge, the communication manners and the degree of trust in a company, the success factors on initializing a business analysis will be identified to conclude with suggestions on how business analysis can be prepared within the company.

2 Drivers of changes in corporate structure

In the globalizing environment of a modern organization, new markets, competitors, and individual customer needs are constantly arising. Additionally, the company has to respond to the changing requirements of internal and external stakeholders\(^2\), which are often related to innovative information and communication technology (ICT) recently launched on the market. By responding to these developments companies grow into flexible, complex networks within a short period of time (Schöneberg, 2014, p. 2). The unsteady environment requires a more flexible business structure in order to react to fast changing customer needs and volatile market conditions. The trend develops towards new organizational forms, as agile networks with low hierarchical structure, more autonomous entities, and loosely linked departments. These flexible networks, including vertical linkage to suppliers and customers and horizontal linkage to competitors, are complex structures which make it difficult to interact within and fully understand its' interdependencies (Cabello, et al., 2014, pp. 2-3). Thus, not only managers are facing new challenges while conducting their strategic plans. Carrying out a business analysis is also growing complex the more complex the corporate structure is, because the analyst, supporting management in strategic planning, needs to understand the whole company with its processes and interdependencies between entities. In order to cope with these challenges, managers as well as analysts need to understand how a corporate structure can grow complex. Thus, the factors which are driving complexity in corporations need to be identified.

2.1 Drivers of complexity in corporations

According to Schöneberg, managers are concerned about growing complexity\(^3\) of decisions, as they can have serious consequences which are not predictable due to the complexity. Hence, results and consequences of strategic management decisions which have been tested over time

\(^2\) In this paper internal and external stakeholders are summed as stakeholders according to the approaches of (Schmidt, 2009, p. 168) and (Williamson, et al., 2004, p. 9). Examples are employees or end-users and their departments, board members, customers, suppliers and governments.

\(^3\) The term complex is based on the Latin word "complexus" which stands for comprehensive, entangled, interdependent in the sense of consisting and interconnected (Köbler, 1995). A detailed discussion about the meaning of complexity can be found at (Bechmann & Steitz, 2009, pp. 43-44)
need to be reassessed because their focus is too limited for the global environment (Schöneberg, 2014, p. 2). Furthermore, the interdependence between entities is volatile and the factors driving the complexity of company's structure are unstable and interdependent, which has to be considered permanently in decision-making. Consequently, actions reflecting the same initial position may result in different effects (Schöneberg, 2014, p. 15). This constitutes the first and most important challenge to managers and analysts. Thus, those complexity drivers should be identified which may be influenced by the management strategy. Schöneberg distinguishes exogenous and endogenous drivers of complexity according to the way in which the causes affect the company, and the power management can possess upon them. Exogenous complexity drivers are evoked by society as legal, political, or social conditions or by demand, supply, and competition condition on the market, both are not controllable by the management (Schöneberg, 2014, pp. 16-17). Internal complexity drivers are interacting with each other, but are controllable to a certain extent. To give some examples following Schöneberg, endogenous complexity drivers can be found in company's objectives, customer structure, product and product range and technology. In addition the processes, the organization and its structure, as well as the planning and regulation system are considered to drive the complexity of the corporate structure internally (Schöneberg, 2014, p. 17). The interdependencies between the drivers of complexity are illustrated by Schöneberg citing Gießmann and Lasch stressing that especially the complexity of product and product range is determined by customer needs or legal requirements, which are identified as exogenous complexity drivers. (Schöneberg, 2014, p. 18). Another example is the customization of products according to individual needs, which leads to less standardized product structures (Schöneberg, 2014, p. 18). These examples illustrate that changes of factors have to be considered in the corporate strategy and will affect the business structure.

Thus, the drivers of corporate complexity can be either internal or external, and some are controllable by management strategic planning while others are determined by the market conditions. In any case, interdependencies between the complexity drivers multiply the whole complexity construct. As each of the mentioned drivers of complexity affects business and its strategic direction in a direct or indirect way they have to be considered in management strategic planning. Assuming that a narrow product range, a few types of technology, and a clearly defined small target group are requiring less specialization, the complexity of production processes and corporate structure might be kept relatively low, however. Hence, the degree of influence a complexity driver has on the companies' structure can be managed, if the corporate strategy is
not only aiming at increasing shareholder value. In short, limiting complexity of the corporate structure can be done by keeping the controllable complexity drivers narrow and simple. This assumption is shared by Schönberg pointing out that the avoidance of complexity can be achieved by modular design of products, organizational structures, and processes (Schöneberg, 2014, p. 20). Products will be shaped in components to enable variations. Anyway, the avoidance of complexity is limited by the purpose of staying competitive (Schöneberg, 2014, p. 20). Thus, when designing the corporate strategy managers have to consider the trade-off between the price of coordination to manage the complexity of the companies’ structure and the potential profit for international expansions and a customized product range.

The above listed complexity drivers are all influencing the corporate structure, because the production process needs to be aligned. As the changes in organizational structure are responses to the complexity driving factors it will be assumed that the actions taken to cope the complexity will result directly or indirectly in additional specialization or division of labour within the corporation.

2.2 Division of labour

It can be supposed that the structure of a company is determined by its division of labour. Introduced by Adam Smith, the trend has been existing for many decades now and specialization is common in business nowadays. Adam Smith explained the three main advantages of division of labour. First, the increasing experience which workers are gaining by concentrating only on certain production steps leads to learning benefits. Second, deeper knowledge about one task enables the worker to execute that task at a higher level of quality as potential for improvements can be identified. Third, the worker is able to perform faster, as no switching between different steps takes place (Smith, 2009, pp. 36-37).

Pugh et al. point out that the degree of specialization in a company can be identified by the quantity of specialists or by the amount of different functional departments. They distinguish two types of specialization. First, the number of specialists involved to fulfil a task. Second, the amount of different actions performed in a business unit which describes the extent and limits of a task (Pugh, et al., 1963, pp. 301-302). Schwarz and Suedekum broaden the focus to conglomerates of companies, where the degree of specialization can be determined by the amount of highly specialized suppliers each of which execute very limited tasks (Schwarz & Suedekum, 2011, p. 2).
A study of Blau shows that a high degree of professionalization in small companies tend to lower the cost of operations. Although specialists are getting higher salaries, the contribution they offer by improving the performance quality with their expert knowledge and by advancing the administrative organization, results in lower operational costs in smaller companies (Blau, 1974, p. 237). This is normally achieved by the implementation of regulative processes in their area of responsibility leading to a higher degree of documentation, standardized procedures, and control mechanisms, which comes along with the growing number of employed professionals (Pugh, et al., 1968, p. 82). Anyhow, Blau found that the contrary holds true in larger companies while observing the effects of increasing the degree of professionalization (Blau, 1974, p. 237). Blau explains this finding by suggesting that the gains in administrative coordination a professional can achieve by putting its responsibility in a wider framework, can only be accomplished in companies small enough for personal contact with all employees (Blau, 1974, p. 237). With the growing number of departments, the internal complexity creates problems, which are reflected in the cost of operation. Thus, the profitable effects of division of labour or professionalization are eaten up in larger organizations by communication and coordination difficulties (Blau, 1974, p. 238).

The second type of specialization introduced by Pugh et al. is characterized by small production steps which require less qualified workforce resulting in lower labour costs. This form of division of labour can be found in Blau as well, who states that in contrast to the high degree of expert specialists, the undemanding assignments resulting from division of responsibilities lead to routine tasks requiring minimal knowledge (Blau, 1974, p. 234). By separating the routine duties from the complex ones, divisions are formed which are either performing only routine tasks or just complex ones. (Blau & Schoenherr, 1971, p. 279). The simple and narrow tasks create the need for additional managerial coordination between the fragmented responsibilities of inexperienced employees (Blau, 1974, p. 235). Thus, centralized planning and authority are essential to coordinate routine tasks. This administrative effort is not needed to the same extent for complex divisions, because the employees are able to perform a broader range of tasks and the duties are less fragmented, requiring less coordination. (Blau, 1974, p. 235). That may lead to the problem identified by Adam Smith who argues that the routine of repeating one single task without the challenge of facing problems disables the worker to deal with abnormality because the individual loses the ability to consider the impact of its duties on the whole process. The person loses interest in the work, resulting in less communication and less judgements about the own performance (Smith, 2009, pp. 43-44). In addition, to coordinate the fragmented routine
tasks, the centralized management depends strongly on upward communication. With the purpose of being informed about the potential profit employees can generate, managers in various departments may facilitate the communication with the management (Blau, 1974, p. 235).

To sum up, by allocating the complex duties to some specialists and the simple routine tasks to a multitude of workers, the need for coordination increases and workers might get discouraged by the repetition and lack of challenges. Thus, the division of labour has to be done under consideration of the negative effect of increased coordination. The communication with management requires additional managers spread over the organization, who will eat up the reduced operational costs.

2.3 Need for coordination in complex corporate structure

In any case, the problem which was identified in specialization in general is the need for coordination between the single production steps. As a matter of common sense, the degree of specialization and division of labour determines the complexity of a company (Cabello, et al., 2014, p. 11), (Clark, et al., 1987, p. 755), (Blau & Schoenherr, 1971, p. 293) leading to outsourcing to various suppliers (Schwarz & Suedekum, 2011, p. 3) and ending in an increasing amount of different interdependent subdivisions and positions (Blau & Schoenherr, 1971, pp. 55-56). These flexible networks of inter-reliant departments including contracts to customers, suppliers, as well as competitors, are hard to understand. Employees tend to lose market orientation and customer focus in such corporate constructs, because they are not able to identify the end customer. That makes them incapable to understand customers' needs and requirements (Cabello, et al., 2014, p. 3).

Already in the 1990s, researchers found that the benefit of specialization is limited because the growing complexity of production processes require coordination and communication which nullify the reduction of operational costs and production time. (Clark, et al., 1987, pp. 755-756), (Blau & Schoenherr, 1971, p. 293). Foss also explains that the correlation of components cannot be dissolved by specialization (Foss, 2001, p. 152) resulting in the need to coordinate between every single task in order to understand, perform, and optimize the whole process successfully (Foss, 2001, p. 163). Additionally, a strict timing of tasks and well-established communication system are needed (Clark, et al., 1987, p. 738). Thus, in a specialized company, explicit organization between work units is crucial to ensure an even operational flow (Lee & Walsh, 2011, p. 2). The success in process and product innovations of a specialized company also critically
depends on the organization which can be attained between the departments (Lawrence & Lorsch, 1969, p. 44).

The coordination between international business units requires information exchange and relationships across departments. Cabello et al. state that tools are needed which represent the structure of departments and allow peers to communicate according to them (Cabello, et al., 2014, p. 12). The more complex a business structure and the process of decision-making is, the less probable it becomes that essential information reaches the relevant department in time (Cabello, et al., 2014, p. 10). This problem is exacerbated by the global growing competition and shorter product life cycles because companies are forced to create more efficient process and cost structures in order to respond quickly to market developments and customer needs (Erek & Zarnekow, 2009, p. 415). The modern value chains are digital and formed according to the relationships between producers, suppliers, and customers. Thus, in order to maintain the competitive position, the information management policy has to promote potentials of the ICT in solution development (Erek & Zarnekow, 2009, p. 415). Schöneberg also states that, under the conditions of a global environment, companies constantly need to deal with new markets, competitors, and individual customer needs (Schöneberg, 2014, p. 18). This fast changing information about clients, goods, exchanges, and transactions require the enlargement and adaptation of the ICT. An ICT which is well-established and optimally adjusted to the companies' strategy can build a basis for effective knowledge exchange (Barratt-Pugh, et al., 2011, p. 85).

To sum up, the structure of companies is developing to a more global and complex one. As access to international markets becomes easier, competition is growing global and harder. In addition, customer needs are becoming more hybrid and individual along with rapidly changing customer preferences. This requires specialization on certain product features as well as immediate reaction to changes on the market which calls for flexible corporate networks of internal departments, suppliers, and customers. In these complex structures coordination is essential to enable supervision and improvement of processes and maintain the end-customer focus. This coordination can be facilitated by ICT arrangements.

In such complex organizational structure, the influences of strategic management decision are hard to predict and the supervision of the whole company is getting complicated. In order to regain an overview of the complex corporate structure, a business analysis shall provide sufficient information to predict most of the consequences resulting from strategic plans. Anyway, the complexity of the company determines the complexity of the business analysis. The new
challenge the business analysts are facing is to act in a network of departments forming an international value chain offering a variety of products on the market. This is not only requiring new skills and know-how to the analyst, it is also more time consuming and the risk of not delivering the relevant information at the time of decision-making grows.

3 Business analysis

In a complex organizational structure, it is a tough job for the management to keep track of the responsibilities and outcome of every business unit. As described above, such an overview is essential to develop an adequate competitive strategy for the global market. With the purpose of enabling the management to decide whether a business analysis may support its strategic work, a clear picture is needed demonstrating what benefit such an analysis may bring. In order to choose the right person to conduct the analysis, the management has to be familiar with the role, tasks, and requirements of the business analyst. Additionally, changes in the environment, making the company structure more complex to be considered as challenges for business analysis.

3.1 Definition and execution of business analysis

In the complex corporate structure, the need for a business analysis can arise from different causes or contexts. Hass assumes that the variety of definitions in literature is due to the fact that business analysis are done in diverse contexts to solve a variety of problems. While some corporations sum the tasks of fetching and analysing requirements on business solutions and change management under that term, others extend the definition to financial investigation, quality management, progress of the business, testing, coaching and the documentation of processes and guidelines (Hass, 2008 b, p. 11). Regardless, the definition of IIBA is often cited in the literature as it leaves space for several types of application in the diverse context of business analysis.

"Business Analysis is the practice of enabling change in an organizational context, by defining needs and recommending solutions that deliver value to stakeholders. The set of tasks and techniques that are used to perform business analysis are defined in a Guide to the Business Analysis Body of Knowledge (BABOK-Guide)" (IIBA, 2014)

As change in organizations can be found in various departments and stages driven by diverse factors, this broad definition will further be completed by several interpretations and descriptions of business analysis, its targets, and effects.
Williamson et al. describe analysis of organizations as a process of sorting and classifying data which is later evaluated, in order to understand the major influences on the organizations and their activities (Williamson, et al., 2004, pp. 6-7). They argue that this comprehension enables to pose detailed questions about operations and permits deeper insights into the entities of the company. By analyzing each entity as such, the whole business and its competencies and resources as well as the linkages between the units will be examined (Williamson, et al., 2004, pp. 8-9). While Williamson et al. focus on the process of sorting and classifying data with the purpose of understanding the main influences on the organization and its activities (Williamson, et al., 2004, p. 8), Binner explains business analysis, as the tasks and methods used in order to understand the corporate structure, principles and procedures and find a solution to the current situation which will reflect the different stakeholder concerns (Binner, 2011, p. 82). This description is quite close to the one of the IIBA, but it focuses more on the comprehension of the business, than on carrying out changes in the company. Kuhn states that business analysis treats improvements on the electronic data processing (EDP) system in order to advance the efficiency or effectiveness of the company's processes (Kuhn, 2011, p. 97). The results are business cases, as recommendations for future changes, going along with the changing environment of the company (Kuhn, 2011, p. 97). Thus, the EDP system needs to be improved or features will be replaced according to the requirements derived from environmental changes or stakeholder needs. Therefore, business analysis shall include a stakeholder analysis, business process modelling and requirement engineering, in order to identify the adequate improvement for the EDP system (Kuhn, 2011, p. 97). Hass is concentrating more on the solution of problems mentioning the batch of responsibilities, skills, and methods needed to be able to make out business needs and establish solutions to business problems. Such solutions often affect the EDP system, the company's processes or general organizational changes (Hass, 2008 b, pp. 10-11). Effects on the EDP system are nowadays the matter of bigger projects treating changes, adaptation, or creation of business applications (Hass, 2008 b, pp. 10-11). Thus, business analysis is frequently dealing with IT solutions. This is due to the fact, that in most markets, a competitive advantage can only be based on a superior EDP system, because conditions of labour and resources are globally the same (Hass, 2008 b, p. 12).

In consequence, the discussion shows that a common definition of business analysis cannot be found due to the variety of applications it may have. Anyway, the debate allows to propose, that business analysis is treating changes in the company which are derived either from environmental
factors, stakeholder requirements or problems identified internally. These changes are usually affecting the company's processes or IT solutions and are crucial to survive on the competitive market.

According to Williamson business analysis starts with collecting and understanding the data which later has to be sorted and classified. As Schmidt states, after the decision to carry out a business analysis, information reflecting the current situation has to be surveyed and accumulated (Schmidt, 2009, p. 73). Because the quality of such data and information determines the quality of the solution proposals (Schmidt, 2009, p. 73), the phase of information search in business analysis is perceived as the most crucial one and will be centre of this work. With the purpose of gaining an overview of the whole process, the five steps of a business analysis will be listed following Blais\(^\text{4}\). First, identify and describe the problem and the product range. Second, gain information, design and describe the solution. Third, keep up to date with the requirements of stakeholders throughout the whole solution development. Fourth, organize the acceptance of stakeholders, according to the criteria set in the second phase. Fifth, facilitate the activation of the solution (Blais, 2012, pp. 361-364).

Concluding, business analysis can be defined in this paper as the sum of actions a company has to carry out in order to consider stakeholder's requirements to process changes within the organization and increase the corporate value. The analysis is often done on company's processes and is structured in certain phases, built upon each other. Herein the information search will be focused because the success of business analysis depends strongly on the outcome of this phase. The analysis can only be executed successfully, when a clear and measurable aim is formulated. According to this aim, business analysis can be designed in a multitude of different ways, treating every possible topic which may occur in the organization.

3.2 Reasons for a business analysis

The changing environment of companies requires a fast and flexible adaptation to business procedures. As Hass states, that handling change is getting more important than focusing on the competitive advantage only (Hass, 2008 b, p. 3). As the market is changing continuously, the basis of a competitive advantage may change from one day to the other. So as to survive under the global competitive pressure, it is crucial to improve business procedures, products, and services, with the purpose of increasing the companies' value (Hass, 2008 b, p. 3). Therefore, companies

\(^4\) For detailed information see (Blais, 2012, pp. 361-364)
need to generate analytical know-how and skills about their capabilities with the purpose of defining their strategy and realizing new business opportunities, finding solutions to company's threats and choosing the changes which need to be realized first (Hass, 2008 b, p. 4). This know-how can be generated and spread by the business analyst supporting the management in decision making. The changes will be selected always keeping in mind the overall strategic goals of the corporation (Hass, 2008 b, pp. 3-4). Herein can be identified the most important benefit of the business analysis. As analysts are preparing requirements for changes with additional, relevant information for management decisions and evaluating them under the strategic objectives, they are conducting an important support to the management. Blais cites the BABOK-Guide to emphasize that the business analysis contributes to transform the corporate objectives into operational targets by setting the course of action to be conducted to achieve them. This includes the analysis of organizations interactions, capabilities and functions aiming to deliver products or services to customers (Blais, 2012, pp. 4-5). Hass highlights that, the challenge lies in getting familiar with new technologies for information exchange in the complex-growing projects for changes in business processes and in restructuring the organization according to its competencies and abilities. This includes outsourcing activities, reallocation of staff and know-how as well as merging with business partners (Hass, 2008 b, p. 4). These changes create additional business lines and give new structures to business processes. Therefore the organizational structure needs to be adapted and technological support is needed (Hass, 2008 b, p. 4). According to Kuhn the complexity of technology, functionality, data, and distribution hamper the development of EDP systems, which needs to be maintained across company boarders, as a result of outsourcing activities (Kuhn, 2011, p. 94). Thus, the implementation, maintenance and improvements of such EDP systems require the analytical and systematic thinking of a business analyst (Kuhn, 2011, pp. 94-95). Hass states that business projects that are not related to IT topics are becoming seldom. The new challenges of this trend are not only the changes which have to be executed by the IT department (Hass, 2008 b, p. 12). The major problem nowadays lies in the communication between business and IT people. As specialists can be found in the technical department and on the business side, the communication between both parties is often inefficient and full of misunderstandings. According to Hass, there is a need to link both parties together which can be achieved by the know-how of professional business analysis before and during the implementation of the business solution (Hass, 2008 b, p. 12). This phenomenon is also described by Junginger and Kabel, arguing that the inter-organizational business processes are complex and intertwined. A business process analysis is the key to keep a transparent and clear overview of the
whole process, because weak points in the corporate structure can be identified by describing the interfaces between the business units. The same holds true for internal processes (Junginger & Kabel, 2008, p. 76).

To conclude, a business analysis is done in order to prepare, design, conduct, and supervise changes within the company, aligning every action to the corporate vision to achieve its goals. Acting global, changes calls for the additional support of business analysis, as customer needs and production chains are complex and business entities face difficulties in communicating efficiently within the corporate structure. Thus, the analysis will enable the company to react immediately to changes and maintain its competitive advantage on the market.

3.3 Role of the business analyst

With the purpose of enabling the management to choose the right person for business analysis, the diverse roles a business analyst can play have to be elaborated. According to Blais, there have always been people who sought for solutions to business problems in the long history of companies. These people were innovators, business raisers, technical chiefs, creators, business people, or workers (Blais, 2012, p. 20). Even though the profession of the business analyst is not a new one, there is no common definition or job description until today (Kuhn, 2011, p. 95). According to Schmidt, several new roles as consultants or company developers in the organizational practice were implemented, without having a clear set of responsibilities. These people are often set up as a staff unit which assist the management and perform organizational tasks and are frequently titled business analysts (Schmidt, 2009, pp. 15-16). Anyhow, according to Blais, the role of the business analyst grew more important when business people admitted that they are unable to communicate successfully with the information technology department (Blais, 2012, p. 18). Thus, managers had to engage some employees to explain the programmers, what the business people require. Often this was a so called super user, who was the most affine with the computer within the department. That person could have been titled business analyst already (Blais, 2012, p. 18). He states also that many IT projects fail, because there is no person in the project team which is able to take the role of a business analyst. Anyway, that role depends on the business environment he is engaged in (Blais, 2012, p. 5). Apart from the IT-related roles, there are still functions which are only related to the progress of the business. In these roles, the business analyst acts as a linkage between the stakeholder’s requirements for change related to procedures, policies, information and KMS and the management (Doucek, et al., 2013, p. 17). Further, he determines and communicates with users in order to set the specification explaining
the solution which should be implemented to carry out the change (Doucek, et al., 2013, pp. 17-18). According to Blais, further roles can be identified which a business analyst may perform in a company. He calls them Intermediary, Filter, Investigator, Facilitator, Diplomat, Business Process Improver, Quality Assurer and Change Agent (Blais, 2012, p. 48). The role as a Filter is referring to the task of filtering and evaluating the change requests and deciding how they should be handled. As a Facilitator, the analyst supports management and solution teams in understanding certain issues and assist in the solution process. As a Diplomat, the analyst is negotiating with conflicting parties, in order to find an overall accepted solution (Blais, 2012, p. 48). The titles of the other roles explain already which function the analyst occupies in the company. Blais separates the above mentioned roles into more detail. As this paper is mainly focussing on the roles as Intermediary and Business Process Improver, the other roles will be waived. According to Blais, the business analyst most commonly is a key player in these two roles by successfully implementing IT solutions. As he is neither an IT engineer, nor a business management authority, but is able to understand the interests of both parties, he or she is able to negotiate and formulate the solution, so that both parties understand the concept. In addition, the analyst knows quite well, how the outcome can be increased at lower costs (Blais, 2012, p. 3). Thus, the analyst is an agent for change, using the technology to adjust the business, solving problems, and enhance process design with the purpose of increasing the corporate value (Blais, 2012, pp. 4-5).

In sum, although the work of the business analyst has always existed its role is relatively new to companies. Hass stresses, the value a business analyst may bring to a company is often underestimated. Years ago, the task of optimizing processes has been done by project managers, systems analysts, or business managers. With the new position, business people - while communicating with IT - have someone responsible to solve the problem (Hass, 2008 b, p. 13). In a nutshell managers can employ business analysts in various roles according to the companies' problem or need for analysis. Anyhow, by recruiting the right person for each role, the tasks and requirements for the business analyst has to be defined closely, to enable a successful performance.

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5 Hass identifies the business analyst as a visionary, transforming the corporate vision into reality (Hass, 2008 a, p. 23) or as a leader, stepping into non-technical projects before they start (Hass, 2008 b, p. 11). Blais names the business analyst a problem solver, adding value to the companies' changes (Blais, 2012, p. 1).
3.4 Tasks of the business analyst

As the roles of the business analyst vary a lot according to the area to which the analyst is assigned, the tasks are even more variable and diverse. Nevertheless, the most common tasks of business analysts need to be investigated to provide an overview of the possible assignments the analyst may have. The overall responsibility of the analyst is formulated by Kuhn, according to whom the business analyst brings new competencies and skills into the company, thereby ensuring the effective usage of EDP systems and sustaining the competitive advantage. When processes are outsourced and complex EDP systems get into action, system thinking is needed which is the core competence of a business analyst (Kuhn, 2011, pp. 94-95). In contrary, Binner argues that the business analyst shall provide new IT based management strategies and concepts which are derived from customer and product requirements, in order to strengthen the competitive advantage (Binner, 2011, pp. 80-81). Furthermore, the analysis of competition and environmental factors including a future dimension shall be executed by the analyst in order to find possible candidates and parameters for benchmarking. (CIMA, 2011, p. 59). As a strategy-oriented organizer, the analyst supports the management in strategic tasks like planning the corporate strategy (Binner, 2011, p. 82).

Table 1 summarizes of the tasks a business analyst should fulfil according to (Doucek, et al., 2013, p. 19), (Kuhn, 2011, p. 97), (Binner, 2011, p. 82), (Schmidt, 2009, p. 16), and (Hass, 2008 a, pp. 19-20,23-24). The table is the result of collecting and evaluating these tasks, identifying overlaps, and adjusting the wording to a more general one, in order to define common duties. In the first column the tasks are listed and in the second to sixth column the task is marked with a cross, if the author, named in the headline, found the particular task as responsibility of the business analyst. The frequency of naming the task is displayed in the last column called "Totals". The tasks were scored according to the frequency they were named. The task with the highest rating is the most relevant, because the analysis shows, that this is a common task for business analysts in different companies and job profiles.
<table>
<thead>
<tr>
<th>Tasks</th>
<th>Doucek</th>
<th>Kuhn</th>
<th>Binner</th>
<th>Schmidt</th>
<th>Hass</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster collaborative work with business representatives and the technical team</td>
<td>x</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>5</td>
</tr>
<tr>
<td>Analyse, design, standardize and optimize business processes and corporate organizational structure</td>
<td>x</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Document and analyse the requirements on EDP System, processes or communication, based on adequate standards and methods and assign them to employees</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>4</td>
</tr>
<tr>
<td>Modelling, re-engineering, find solutions and execute feasibility studies, to identify the best processes and organizational structure</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Implementation and customization of standard software based on specification developed from requirements</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Identify and analyze risks which may occur during the implementation of the requirements and derive strategies to minimize the risk</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Evaluate the requirements whether they go conform with the targets or regulations of the organization</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Gain a continuous supervision focused on value creation during the implementation of requirements</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Translate the requirements from the operational department into a concept for development in the IT department, so that both parties understand the concept</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Management of knowledge and competencies of employees in order to develop a system of knowledge management</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Supervise and plan changes and strategic activities in the area of business analysis</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Create a plan for business analysis and develop business architecture: as-is/to-be models</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Directing the corporate strategy to the business environment in order to become the competitive leader</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Develop and maintain the business architecture; define business problems and opportunities</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Own table based on (Doucek, et al., 2013, p. 19), (Kuhn, 2011, p. 97), (Binner, 2011, p. 82), (Schmidt, 2009, p. 16), and (Hass, 2008 a, pp. 19-20,23-24).

Table 1: Tasks of the BA

The task of most business analyst is to support the cooperation between business representatives and the technical or IT department. Table 1 shows that there are three tasks which were mentioned in nearly every analysed text which are the management of optimization of business process and organizational structure in alignment with the target system, value creation by finding the best solutions and management of the requirements of diverse stakeholder groups. In order to find the optimal solution, the analyst needs to collect, evaluate, and select the requirements from various stakeholders, develop possible solutions, for example in IT specifications, and carry out feasibility studies for every option. During these actions, risks should be identified and analysed. Further, several tasks were only named once. These tasks are not listed here, as they seem to be less important. For example, Hass found a lot of tasks which others did not mention. Her practical experiences as a business analyst professional allow her to break down the responsibilities into operational tasks. Thus, she identified how to ensure,

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6 for detailed description of those tasks, see (Doucek, et al., 2013), (Kuhn, 2011), (Binner, 2011), (Schmidt, 2009), (Hass, 2008 a)
maintain, and supervise the constant value creation of requirements or how to collect and illustrate crucial, strategic information of the different types of stakeholders.

Anyhow, most of the so far mentioned tasks of the business analyst require a broad set of knowledge and experience about the business. As mentioned in chapter 3.1 the crucial step of business analysis is to collect information. This can be done in various ways. According to Schmidt, the first and most important source of information is the KMS, where tasks, procedures, and connections between business units are explained (Schmidt, 2009, p. 230). This source is so valuable, because the employees are not needed for explanations and the business analyst can gain a general overview of the processes without support (Schmidt, 2009, p. 230). In any case, the documentation is not necessarily complete or reflecting reality. Thus, if the KMS is not capable to deliver the required information, the business analyst needs to search for insights by applying further techniques (Schmidt, 2009, p. 231).

There are several communication options enabling the analyst to develop a deep understanding of the company. Here the focus will be on interviewing staff members, as it is, according to Schmidt, the most effective and efficient one. Nevertheless, interviews need to be well-prepared to facilitate acquiring additional information on processes or business issues. Schmidt suggests that the following questions need to be clarified in advance: What is the aim and content of the interview? Which technical aspects need to be considered for the interview? Who will be qualified to answer the questions? In short, the interviewer needs to be well prepared (Schmidt, 2009, p. 200). Additionally, the psychological threat for the interviewee should not be underestimated. For the employee, it is normally perceived as inconvenient to find himself in a situation, where his area of responsibility is in the focus of change (Schmidt, 2009, p. 201). Thus, the interviewer has to create a positive atmosphere and convince the knowledge owner that his requirements are needed to find better solutions for his area of responsibility. A confident atmosphere can be found in trustworthy relationships which can foster the willingness to provide information (Schmidt, 2009, p. 201). Brijs recommends that the analyst can first check the degree of trust in the relations between the departments and stakeholders. In an attempt to do so, the analyst checks whether aims are shared by all units, how reporting is done, which essential information is missing, and which decisions would have been made in a better way, if the information had been complete. In an interview the business analyst should ask precise questions upon goals, communication processes, time, costs and quality (Brijs, 2013, p. 284). To convince the stakeholder of the change and enable a successful business analysis, the following issues should
be assessed: Is there a lot of ad hoc reporting done, and how time consuming is that, measured in person-hours? Is the asset used optimal and which risks of failure are inherent in the asset management? Can the human resource management policies be developed in the direction of reducing times of absence? Is the amount of coordination meetings and coordination steps reducible? Can the negotiation position be improved by asymmetric information? Is there potential for improvements in pricing models, in qualification of salespeople, customer valuation, order cancellations, or forecasting? (Brijs, 2013, pp. 288-291) Brijs states that the analyst documents the results of the analysis in a report which contains preconditions and target system found in the company. It describes the purpose of the analysis, business requirements, and relevant stakeholders groups (Brijs, 2013, p. 292). In addition, requirements on data and security are declared, product range is illustrated and a plan and task list for the implementation is provided in the business analyst report. When business analysis shows that the capabilities or resources of the management are too limited to execute the needed change, the analyst will note that in the report (Brijs, 2013, p. 292).

In sum, the business analyst is facing a multitude of tasks which may differ depending on the job description, role in a company, and project engagement. This broad range of tasks requires the business analyst to be able to switch between roles and tasks which need a high degree of both, flexibility and broad knowledge about the company and its processes. Possessing these skills and knowledge, the analyst still depends on the KMS and communication with employees and management, with the purpose of gaining detailed information and understand the interdependencies of business units and its environmental drivers of change. Consequently, in order to perform the various tasks of a business analyst successfully, a lot of requirements should be fulfilled by the character of that person.

3.5 Requirements on and challenges of the business analyst

Reconsidering the plenty of diverse roles a business analyst is performing in a company, one can imagine that the tasks assigned to the analyst according to each role differ as well. So do the miscellaneous requirements on the business analyst profile. In order to grant an overview of the several requirements found in the literature, Table 2 was developed, following the same procedure as Table 1. By examining and analysing the work of (Blais, 2012, pp. 9-10), (Hass, 2008 b, p. 20), (Kuhn, 2011, p. 97), (Junginger & Kabel, 2008, pp. 64-65), (CIMA, 2011, pp. 59-60), (Binner, 2011, p. 82) and (Doucek, et al., 2013, p. 24) the mentioned requirements on the job of a business analyst were listed and similarities were identified. Going conform with the structure
applied in Table 1, the first column shows the requirement and the second to seventh column mark, whether the author mentioned this requirements in his or her findings. The last column shows the total number of authors naming that requirement and is the basis for the score. The more frequent a requirement was named, the more commonly requested is this skill, ability or know-how by companies which are hiring business analysts. When comparing the requirements and tasks, the amount of different tasks is higher than the amount of requirements. This is due to the fact, that the general skill, ability and know-how listed as requirement, enables the analyst to perform a variety of specific tasks.

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Blais</th>
<th>Hass</th>
<th>Kuhn</th>
<th>Junginger &amp; Kabel</th>
<th>CIMA</th>
<th>Binner</th>
<th>Doucek</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand the IT infrastructure and its strength and weaknesses (Technical skills)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>X</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Communicate efficiently verbal and in writing</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>X</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Analytical thinking</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>X</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Ability to gain and comprehend processes of each business unit and the sector</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>X</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Ability to solve problems and investigate information to find adequate solutions</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>X</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Ability to collect requirements from stakeholders, process specifications and communicate them to IT department</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>X</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Relationship building to stakeholders and management</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Moderate meetings (Interaction skills)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Appreciate ethics and integrity</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Identify and reduce operational risks of new solutions while considering changes</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Being capable to design processes with standardized models (Process Modelling)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Own table based on (Blais, 2012, pp. 9-10), (Hass, 2008 b, p. 20), (Kuhn, 2011, p. 97), (Junginger & Kabel, 2008, pp. 64-65), (CIMA, 2011, pp. 59-60), (Binner, 2011, p. 82) and (Doucek, et al., 2013, p. 24)

Table 2: Requirements of the BA

Anyhow, according to the most relevant task which is the coordination between the business and the IT departments, the most important requirement on a business analyst is the understanding of the infrastructure and its strengths and weaknesses. Only if the analyst is familiar with the EDP System, it can foster the collaboration between both parties. Another quite relevant requirement is to communicate efficiently which refers to the diverse roles the analyst is performing. Blais point out that as an intermediary the analyst needs to communicate with and between every hierarchy level within the organisation. Therefore, he or she needs to switch between roles and type of language (Blais, 2012, p. 48). Schmidt argues that, communication is hampered when employees perceive the language of the analyst as too specialized to be understood, or the analysts' focus as too general. That might lead to resistance, so that information will be held back (Schmidt, 2009, p. 43). Thus, the analyst needs to ensure, that he adapts his language and behaviour to the staff and is keen on every detail they are dealing with. In another occasion, the analyst appears as a leader, during execution of change implementations or as a consultant, when
suggesting his solutions to management. Furthermore, to communicate professionally is essential, as one of the tasks of the analyst is to collaborate with all stakeholder groups. According to the findings of CIMA, stakeholders will establish trust towards a business analyst who is providing interesting information at the right point in time. Information shall be selected and prepared, by visualizing data, according to the interests and focus each stakeholder has (CIMA, 2011, p. 59). So presentation skills, the ability to make complex issues clear and to listen closely are requirements which can be linked with communication skills as well. In sum, as a proficient communicator the analyst is able to change between the roles he has to play within his daily work, and perform all tasks in a more efficient and convenient way.

The two second relevant requirements can be understood as interlinked as analytical thinking enables the business analyst to become familiar with new situations and procedures rapidly. Possessing that skill, the analyst is able to identify and understand the processes and problems as well as the risks and understand the requirements of stakeholders.

Some requirements were only mentioned by one author and were therefore skipped here. In any case, further soft skills and hard skills are needed in order to perform all the tasks which may come up in the diverse roles of a business analyst.

Apart from the discussed requirements, there are further challenges on the work of the business analyst which have to be considered before starting the analysis. According to Schmidt, the business analyst needs to understand the aims, fears and problems of employees, who are directly affected by the organizational change, in order to perform well at a social level. Taking into consideration the roles and power distribution within the social structure, the business analysts can be able to succeed with his soft skills and gain the trust of employees (Schmidt, 2009, p. 28).

Piccinno states that it is essential to check, even before starting the analysis, whether the companies' culture is prepared for changes and is letting the analyst proceed to solve organizational problems and create value in the corporation. If this is not the case, the analyst needs to create the environment, in which the creation of value will be welcome to implement the change successfully (Piccinno, 2004, p. 14). Schmidt argues as well that, before and during the execution of change projects a change management needs to be established. This includes actions to create acceptance and maintain motivation of participants, uses conflicts in a constructive way, and reduces resistance with the purpose of enabling a fluent communication between all parties.
In order to lessen antagonism against changes, the analyst needs to be aware of the origin of resistance (Schmidt, 2009, p. 29). Herein, the analyst starts from the assumption that humans tend to neglect changes. With the attitude of never change a running system, they feel offended when their tasks are considered for improvements (Schmidt, 2009, p. 29). In addition, task owners tend to select information proving the so far executed practice as perfect. When errors occur, they are likely to look for the problem in neighbouring working areas rather than in their own one (Schmidt, 2009, p. 29). Finally, the gains of a certain change are hard to measure in advance. This results in considering only the effort, when it comes to decision making (Schmidt, 2009, p. 29). Thus, the analyst is required to overcome the negative image of changes by closely including the employees, informing them in detail about the purpose and every step to achieve the improvement. In short, his challenge will be to carry out change management (Schmidt, 2009, p. 29).

Anyhow, this approach is not necessarily successful. As Hass states, various strategies have to be applied in order to face the resistance against change in a company. The close cooperation with the board members is essential in order to create a working climate which is open towards changes (Hass, 2008 b, p. 73). Leaders, who shall force changes, should be named and a clear responsibility to preserve and increase quality of the new implementation is needed in every business unit. These change agents are often business analysts and shall emphasize and communicate improvements early and implement an incentive system for the new procedures (Hass, 2008 b, p. 73). In addition, the fast reaction to incidents, mentoring, and coaching programs are crucial. Still, the most important strategy seems to stress the benefit and profit of the change (Hass, 2008 b, pp. 73-74). Blais strengthens this argument by pointing out, that the analyst needs to understand the interest of every party and find advantages the change would bring for this party. By doing so, he would be able to motivate the counterparts to cooperate (Blais, 2012, p. 14). Thus, the analyst is required to slip in the role of a sales person, vending the benefit to the employee (Schmidt, 2009, p. 32). As there might exist single staff members or departments in which change is resisted, the analyst has to be prepared, when dealing with new departments or employees, that he has to face the challenge of transforming their attitudes into a change-welcoming one before starting his work (Schmidt, 2009, p. 30).

Another challenge business analysts use to face within IT projects is introduced by Piccinno. He argues, that analysts need to understand the processes, problems or business issues in a very short period of time, without satisfactory access to the process owner. Thus, it is complicated to
collect the knowledge needed and might be impossible to achieve an agreement or find a solution for the problem. In addition, a business or personnel schedule gain more importance than the business analyst's time table (Piccinno, 2004, p. 14).

Hass identifies three main challenges to the business analyst which are first, to avoid being a barrier between the technical and the business department instead of facilitating the communication, deliver the right requirements and bring together both parties. Second, to keep up to date with technological changes as well as business trends in order to maintain the reliability of IT and Business people. Third, to start with iterations before the analysis is completely done in order to find solutions which are not based on theoretical constructs, but on practical feasibility (Hass, 2008 b, p. 93). The crucial part is to realize when the results of the analysis should be shared with technical and business parties, in order to keep the effort to understand the outcome as small as possible. These challenges can be overcome by work experience or mentoring by more experienced peers in the business analyst team (Hass, 2008 b, p. 93).

To sum up, communication skills are most important. Paired with knowledge about information technology systems and the most popular business applications, the business analyst possesses a good batch of skills in order to perform his job successfully. Analytical thinking, the ability to listen closely, and curiosity for details as well as the willingness to solve problems are further requirements on the business analyst. Anyhow, specific, technical skills which were more important in the past have mostly been replaced by broader knowledge and soft skills (Doucek, et al., 2013, p. 24) which are essential in order to establish a successful change management. As changes are often facing resistance, the analyst has to prepare the change projects, in transforming the corporate attitude towards changes into a positive one. Thus, he has to convince the departments or colleagues which neglect changes, of the benefit the change will bring to the individual. Managers, who are looking for skilled business analysts, shall consider the above mentioned requirements according to the tasks and roles the analyst shall perform in the particular circumstance. Only by assessing the characteristics of the job, the right person may be selected.

3.6 Changing context of business analysis

Having analysed the roles, tasks and requirements as well as the challenges for the business analyst, the most influential factor on the work of the analyst has not been taken into consideration so far. As introduced in Chapter 2, the changing conditions in the environment of a
company transform companies' structure. These changes do not only call for hiring a business analyst in order to manage and coordinate the projects for change (Hass, 2008 b, pp. 3-4). The tasks of the business analyst are also growing complex with the complex business processes. In order to regain clarity and transparency, the interactions between entities need to be figured out (Junginger & Kabel, 2008, p. 76). Nowadays, the most critical challenge to the business analyst is the changing environment, as it complicates the understanding of the company and its work processes.

Anyhow, there are more factors which are volatile in the context of a business analysis and should be taken into consideration. One example is the fast, global technological progress which requires a continuous adaptation of the business application. Kuhn argues that business analysis grows more important to companies, as it provides a significant contribution to the achievement of a competitive advantage. Nowadays, the competitive advantage of a company depends on its IT solutions, because they enable improvement on processes and facilitate communication with customers and suppliers (Kuhn, 2011, p. 94). As IT solutions are growing with the company expansions, customers and market conditions are requiring changes on business applications and further development of new IT solutions (Kuhn, 2011, p. 94). In addition, the requirement handling has to be done across companies and the implementation of new business solutions needs to be accompanied by business cases, predicting the outcome of several scenarios (Erek & Zarnekow, 2009, pp. 419-420). Brijs states that the requirements for the content of business cases have changed from just calculating the benefit of certain scenarios, to the evaluation of future potential and strategic values of the proposed solutions, because the conditions on the global market are quite volatile (Brijs, 2013, p. 288). These trends on the global environment of a company are illustrating the problems managers are facing in their strategic planning. Further Hass argues that IT projects are normally exclusive attempts which outcome is hard to predict (Hass, 2008 b, pp. 79-80), due to the lack of experiences. The global market forces companies, with the purpose of finding the best IT solutions, to design requirements together with all business units which are building part of the value chain. This necessitates the knowledge and experience of diverse employees, because the requirements on EDP systems have to be described precisely in order to be developed by programmers. (Kuhn, 2011, p. 95). Along with this development, employees become more affine to IT solutions, as they use various applications on private purposes. This enables them to achieve a better understanding of software products plus generating new ideas on software features. Therefore, they are requiring lots of adjustments
which makes the EDP system more complex (Blais, 2012, p. 82). In addition, the requirements passed through from users or stakeholders tend to be incomplete from a technical point of view and the dynamic environment changes the conditions on which the requirements were based (Hass, 2008 b, p. 79). Thus, the IT development has to adjust the users' requests (Hass, 2008 b, pp. 79-80) and the business analyst needs to evaluate the requirements and find the ones that bring most value to the company (Blais, 2012, p. 82).

In a nutshell, the changes which need to be handled in business analysis are growing more dynamic and unpredictable, because the environment is changing faster. In the past, changes had to be conducted on the local business and developments were relevant only within a sector. Nowadays, the relevant trends should be observed on a global scale. In addition, information technology is developing faster, so that the possibilities for improvements grow complex. Anyhow, employees are evolving to IT affine business people, and may assist in solution development or can support the business analyst in gaining process information to understand the company and its work processes and identify problems or weak points.

4 Understanding the company and work processes
As mentioned above, the crucial step of every analysis which determines the success is the information search on the issue that should be analysed. So, as an initial goal the business analyst needs to understand how the company works. According to Williamson et al., this can include, for example, the organizational structure, the financial performance, and the stakeholders. Further essential information about a firm are the relevant sectors and markets, the product range, the production processes, the value chain, and division of labour (Williamson, et al., 2004, pp. 5-6).

While conducting the study of such information about the business, external complexity drivers and their influence on internal complexity drivers should be considered as well. Schmidt states that companies tend to have written concepts or documents about these topics but the question is, whether these concepts are lived or only theoretical approaches (Schmidt, 2009, p. 231). Thus, in order to understand the business and the functionality of its processes the analyst needs to compare and complement the existing documentation with further sources of information (Schmidt, 2009, p. 231), which can be gathered from employees.

In order to comprehend a business, the business analyst shall ascertain, what kind of product the company is offering on which markets, this includes a stakeholder analysis (Williamson, et al., 2004, p. 5). The organizational environment should be examined, as trends from outside the
company are crucial information for business analysis. To do so, the industries in which the company is active has to be identified with its size, turnover, segments and geographical areas (Williamson, et al., 2004, p. 77). Furthermore, the competitors on each business unit have to be figured out. The environmental forces, their significance and prospect, can be investigated by applying Porter's Five Forces Model\(^7\). Each factor identified in the environmental research has to be analysed according to its opportunities and threats (Williamson, et al., 2004, p. 77), which can result in a SWOT (Strengths, Weaknesses, Opportunities and Threat) Analysis. Next, the business analyst has to become familiar with the organizational structure and its business units (Williamson, et al., 2004, p. 5). Brijs also suggests that the organizational chart shall be understood well, in order to identify the departments and people with power and authority, influencing the companies' outcome. They may be identified as such persons, managers are consulting with, going in copy in mails with important information, forming part of most project teams and are often without managerial positions but very influential. It is important to have them acknowledged, as they may hinder the progress of the business analyst, so they should be convinced of new solutions first (Brijs, 2013, p. 200).

When the organizational structure is clear, the resources have to be investigated (Williamson, et al., 2004, p. 5), because they are indicating the possibilities a company has. Relevant resources are the investments in tangible fixed asset and brands which the business has built up over time, the competencies of a company, inherent in the skills and knowledge of individuals or groups, and the capability in carrying out sales activities (Williamson, et al., 2004, p. 103). Another resource, the analyst shall focus on is the financial performance of the company (Williamson, et al., 2004, p. 5). Herein, the analyst may detect the growth a company is expecting, the development of cash, gross margin, assets and liabilities, as well as the fluctuation in the management team, and whether there are new large shareholders acquired recently (Brijs, 2013, p. 201). These facts can indicate, if and to what extent the company is able to grow in the next years. Knowing these hard facts, the analyst goes deeper, investigating the vision and the mission statements (Brijs, 2013, p. 201). The policies implemented in the company need to be understood for every brand, department, production site, country, and culture which is especially complex in the corporate structure of global players (Brijs, 2013, p. 199).

\(^7\) The five forces according to Porters model are the threat of substitute products and of new market entrants, the power of suppliers and of buyer and the rivalry amongst industry members (Porter, 1980, p. 31). Every dimension has to be considered with its current developments and trends.
Further the decision-making process shall be analysed in detail. This includes which decisions are based on which kind of information, whether they are made by single persons or in teams, as well as the drivers of the decision-making process (Brijs, 2013, pp. 203-204). The analyst shall check to what degree the persons possessing decisions-making power are influenced by their professional background and whether they consider risky options or are more likely to stay within their comfort zone (Brijs, 2013, p. 201). In addition, the risk profile of the company should be examined, as it determines the attitude towards changes. According to Brijs, the distinction between different risk-strategies can be made, based on the set of arguments the company has posed. An "innovator", for example, follows the slogan, that risks are changing the way of doing business, while "laggards" only admit, that they cannot survive in the competition, when there are no changes executed (Brijs, 2013, pp. 214-215). Having the risks strategy identified, the next step is the investigation of customers' behaviour, key success factors on the market and trends influencing the key performance indicators of the company (Williamson, et al., 2004, p. 5). These types of information are essential for business analysis, as they should determine the strategy and target system a company has set up, with the purpose of surviving in the competitive environment or beating out competition by a strong, sustainable competitive advantage.

It is crucial that the business analyst understands what the competitive advantage of a company or brand is build upon as it is the most essential value and determines the general strategy of a firm. (Jasimuddin & Zhang, 2009, p. 707), (Osterloh & Frey, 2000, p. 538). In order to identify the company's competitive strategy Porters generic strategic positions can be applied. Depending on the competitive scope and the competitive advantage three competitive strategies are distinguished. First, low cost leadership on a broad scope, second, differentiation strategy on a wide scope and third, focus strategy which is either on cost leadership or differentiation, but on a small scope (Williamson, et al., 2004, p. 88). As external resources are no longer differentiating one competitor from another, Agrote suggests together with her colleagues, that the mayor source of a competitive advantage can be found in the knowledge an organization owns and its ability to use and manage this knowledge efficiently, with the purpose of preventing rivals from imitating the know-how or procedures. (Agrote, 2000, p. 156), (Barratt-Pugh, et al., 2011, p. 86), (Bourdreau & Couillard, 2006, p. 27), (Naftanaila, 2010, p. 839), (Jasimuddin & Zhang, 2009). The competitive advantage, based on unique knowledge is so hard to copy by other firms because the allocation of know-how will unlikely be the same. As the distribution of knowledge and skills of business members determine the division of labour within a company, the interfaces between
business units will be designed in an exclusive way which cannot be applied by competitors (Agrote, 2000, p. 157). Since the performance of a company in the competitive environment depends on its ability to use the knowledge inherent in the organization, businesses tend to invest resources in knowledge management activities, with the purpose of increasing the internal and external knowledge, a company may access (Jasimuddin & Zhang, 2009, p. 706).

In sum, the business analyst needs to collect the above information about the business and the processes, in order to understand the whole company. An initial source for this information is the KMS. Hence, a well established KMS can be the key to a successful and efficient business analysis.

4.1 Analysis of the knowledge management system
The immense variety and extent of implemented KMS in corporations, their content, and handling should be considered by the analyst. Thus, Blais suggests to design an information gathering plan, enabling the analyst to have a clear focus during information search, and look for the relevant information only (Blais, 2012, p. 206). Nevertheless, gathering information can only be done iterative (Blais, 2012, p. 227). Thus, even with a precise information gathering plan, additional information is required as certain knowledge is inherent in employees and hard to codify (Schewe & Nienaber, 2011, p. 18). Anyhow, the business analyst has to check whether a KMS is implemented in the company and if so, test, to what degree the stored knowledge is valuable. Schmidt claims the lack of integrity and timeliness, the differences between target and performance, and the time needed as problems when relying on KMS (Schmidt, 2009, p. 231). Thus, while analyzing the stored knowledge, the business analyst should be aware of those factors and consider and prepare questions for personal interviews with employees to complete and update the information gathered from the KMS.

The measures to implement a knowledge management and whether and how implementation takes place is often determined by corporate culture. Anyhow, Brijs argues there are very few companies in which knowledge management is forming part of the corporate culture. The majority of larger companies has not been able to institute effective knowledge exchange (Brijs, 2013, p. 35). As Bourdreaud and Couillard argue, the whole organizational knowledge network is a gigantic and complex system representing its own web, because every employee tends to have an individual knowledge network which expands over various organizations (Bourdreaud & Couillard, 2006, p. 26). Thus, the establishment of a KMS is crucial, when a company is aiming to protect its hybrid sources of knowledge, because personnel changes often lead to loss of
knowledge. As certain knowledge can only be generated by experience, information, not stored in the KMS, will leave the company along with the owner of the information (Blau, 1974, p. 73).

The analyst shall investigate whether the KMS is actively used by every employee to share knowledge and prevent the loss of important information. Additionally, the knowledge, documented and stored in the system, should be used in order to understand the company and the problem which should be analysed.

4.1.1 Definition of knowledge management
Clarifying the terms knowledge and knowledge management is essential in order to understand, which knowledge should be found in the KMS and how it can support the analyst to understand the company and its work processes. According to Bourdreaud and Couillard, knowledge\(^8\) has to be distinguished from information\(^9\) and data\(^10\). Knowledge often drives the actions of people and develops constantly as individuals enlarge their personal knowledge by interpreting the presented knowledge and observing what is really happening to them (Bourdreaud & Couillard, 2006, p. 25). That is supported by Jasimuddin & Zang, describing knowledge as assistance for individuals of a company to derive adequate actions and decide in particular situations, in order to fulfil their operational work (Jasimuddin & Zhang, 2009, p. 706). Consequently, knowledge is identified herein as experience, often unexpressed, which is used by individuals to derive actions in certain situations.

With the purpose of investigating knowledge generation and sharing it with the business analyst, a further definition makes sense which differentiates between tacit and explicit knowledge. Following Schewe and Nienaber, tacit knowledge cannot be expressed in verbal or written form. While explicit knowledge is based on objective criteria and can be easily transferred and documented in words. (Schewe & Nienaber, 2011, p. 38) Explicit knowledge is expressible orally, in codes, diagrams or images and can be stored electronically or on paper with the purpose of being distributed. Explicit knowledge enables the transfer of know-how and standardized transmission of knowledge which will persist within the company (Bourdreaud & Couillard, 2006, p. 26). In contrast, tacit knowledge is owned by individuals and generated by personal experiences, mental constructs, insight, instinct and guess, influenced by beliefs and emotion. Tacit knowledge

\(^8\) Defined as "Knowledge. Things that are held to be true in a given context and that drive people to action if there is no impediment" (Bourdreaud & Couillard, 2006, p. 25)
\(^9\) Defined as "Information. Phrases or images (e.g., graphs) that provide the results from analyzing and interpreting data; phrases or images that carry meaning." (Bourdreaud & Couillard, 2006, p. 25)
\(^10\) Defined as "Data. Raw facts, not interpreted." (Bourdreaud & Couillard, 2006, p. 25)
can be either technical and is possessed by experts, or cognitive and refers to mental schemata, beliefs and perception (Bourdreau & Couillard, 2006, p. 26), (Sturz, 2010, p. 495). In addition, tacit knowledge is the essential basis for the competitive advantage, because it is stored by individuals and hard to transform into explicit, tradable knowledge, it is less likely to be imitated by competitors (Osterloh & Frey, 2000, p. 539). Even transferred into explicit knowledge, there will never be exactly the same know-how shared as it was experienced (Schlicher, 2009, p. 347). As Schlicher argues, when experiences are needed on a certain topic, documentation is not useful, as experiences are personal and therefore best transferable in personal communication (Schlicher, 2009, p. 347).

In short, tacit knowledge is the more valuable one, as it can more easily be protected against competitors. However, this knowledge is only sustainable in so far as it can be made explicit and transferred to colleagues as long as the owner stays in the company. Explicit knowledge can be expressed in various kinds of storable ways and shared by a multitude of individuals. The latter is the knowledge which the business analyst is expecting to find in the KMS. Completing that with tacit knowledge transferred into explicit one during communication with employees shall help the analyst to understand the organization.

The above discussion shows that knowledge needs to be managed in order to make it useful. Thus, the term knowledge management will be defined. Knowledge management\(^{11}\) summarizes all management activities aiming at the usage and development of knowledge within the organization, with the purpose of achieving the companies' targets in a best way (Gerhards & Trauner, 2007, p. 9). Kilian et al. define knowledge management\(^ {12}\) as a planned and continuous management of activities and processes which are increasing the effectiveness of knowledge and are enforcing the competitiveness by generation and handling of individual and collective knowledge resources (Kilian, et al., 2007, p. 16). Knowledge management includes the processes and actions related to the knowledge. These processes have to be deep-seated in the corporate culture and require an accurate design and implementation, by the project manager, accompanied by a change manager (Schwarz, 2009, pp. 122-123). Thus, knowledge management can be understood as the enhancement of ideas generated within the company with the purpose

\(^{11}\) "zusammenfassender Begriff für alle Management-Praktiken, die darauf abzielen, in Organisationen Wissen einzusetzen und zu entwickeln, um die Unternehmensziele bestmöglich zu erreichen." (Gerhards & Trauner, 2007, p. 9)

\(^{12}\) "Geplantes, fortlaufendes Management von Aktivitäten und Prozessen, welche die Wirksamkeit von Wissen steigern und die Wettbewerbsfähigkeit durch bessere Erzeugung und Nutzung von individuellem und kollektiven Wissensressourcen stärken." (Kilian, et al., 2007, p. 16)
of improving the organizational know-how and skills. This can be achieved by using the knowledge in a more effective way (von Glahn, 2009, p. 21). Knowledge management is an interdisciplinary effort (Bourdreau & Couillard, 2006, p. 27), conducted by every employee according to his competencies, profession, and ability to learn. It determines the overall level of knowledge, achieved by exchanging expert insights and developing and enhancing knowledge within the company, to strengthen the competitive advantage on the market. This requires a well-established infrastructure for communication and an even information flow within the organization which can be named knowledge management system (KMS) (von Glahn, 2009, p. 23).

Using this infrastructure to communicate knowledge is not the only key for success. Further the knowledge should be critically questioned instead of accepted it as given, because new findings can be made only by reflective analyzing (von Glahn, 2009, p. 24). In addition, the pensive treatment of knowledge increases the social competencies of employees which is essential to maintain the position in a complex environment (von Glahn, 2009, p. 24). Although knowledge is inherent in every organizational unit, the formation of a KMS is a relatively new approach which is mostly only implemented in big, advanced companies. Small enterprises or start-ups tend to concentrate on the production process instead (Bourdreau & Couillard, 2006, p. 25).

To sum up, the documentation system of knowledge is a very valuable approach, as the access to and use of knowledge enables the generation of new knowledge which may enable a company to leave competition behind. The KMS becomes especially important in the complex growing companies' structure and the global complexity, because knowledge is available and traded on a global scale. That turns the protection and management of knowledge into a management task with the purpose of maintaining the competitive position. The way in which the analyst profits from a well-established KMS still needs to be elaborated in detail.

4.1.2 Role of knowledge management in business analysis

Knowledge management is needed to carry out a business analysis, as it supports the analyst in different ways to understand the company or the issue to be analysed. As defined above, the management of knowledge describes actions which are performed with the knowledge of a company, with the purpose of developing the knowledge and increasing the company's outcome. It seems to be inevitable to have some kind of knowledge management established in the firm to keep track of the existing and lacking knowledge.

Following Bourdereeau and Couillard, a well-organized KMS enables a company to keep up to date with the fast changing environment. In order to maintain the competitive advantage on the global
market, managers have to learn as fast as the environment changes, because they have to include advanced product innovation, process design, culture adjustments, leadership, and learning systems in their strategic plans, to generate value in a more efficient way than the competitors can do at that very moment (Bourdreau & Couillard, 2006, p. 24). Thus, the main objective of knowledge management is to make companies more competitive, more effective, more efficient, more flexible, more inventive, and more reactive to changes in markets and supply-chain structure (Bourdreau & Couillard, 2006, p. 24). Bourdrea and Couillard are identifying further tasks of knowledge management. The identification and protection of critical knowledge is as important as the explanation and storage of that knowledge (Bourdreau & Couillard, 2006, p. 29). Additionally the existing knowledge should be applied in all possible situations and new knowledge should be generated constantly (Bourdreau & Couillard, 2006, p. 29). This can be achieved by combining existing knowledge in synergistic ways, by building individual experiences, by permanent learning, and by acquiring external knowledge (Bourdreau & Couillard, 2006, p. 29). Further, the management of knowledge should include the evaluation of risks and weak points in the system, enable to reprocess and increase existing knowledge, to create learning ability, to keep track of the recent gained knowledge in the world, to internalize relevant knowledge from outside and to motivate for the generation of new knowledge (Bourdreau & Couillard, 2006, p. 29). They find the challenges for every KMS in handling complexity, enabling diversity, permitting vast evolution and process power, managing security and massive storage requirements (Bourdreau & Couillard, 2006, p. 28).

However, for business analysis the most affecting role of knowledge management is to generate and to transfer knowledge to the analyst. According to Naftanaila, the crucial component of knowledge management is the transfer of knowledge, as it may enhance the corporate efficiency, by facilitating employees to work together successfully (Naftanaila, 2010, p. 839). Crucially though, managers have to create an environment which fosters knowledge sharing and motivate staff members to transfer and share their knowledge (Naftanaila, 2010, p. 839). Agrote defines the transfer of knowledge as a procedure where the results of one business unit influences the know-how of another division (Agrote, 2000, p. 151). Skilled workers, engineers and assistants which are not hired in the context of the KMS, are performing the crucial part of the knowledge management, as they are generating, transferring, looking up, and using knowledge in their regular work processes (Davenport & Prusak, 1998, pp. 214-215). Thus, knowledge management

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13 "Knowledge transfer in organizations is the process through which one unit (e.g. group, department, or division) is affected by the experience of another." (Agrote, 2000, p. 151)
has to be understood as the responsibility of each and every employee (Davenport & Prusak, 1998, pp. 214-215). As Glahn points out the main task of knowledge management is to make knowledge available to entities within or outside the organization. This knowledge is initially personal and serves to solve certain problems whereby it may be developed further in learning processes (von Glahn, 2009, p. 22). Davenport and Prusak also argue that the exchange and generation of knowledge is included in the daily work of every employee. They agree that consulting with peers how to proceed in new situations or problems does transfer knowledge. However, the sharing of this knowledge is very limited and fragmental, because only that knowledge is available from peers, who are located closely (Davenport & Prusak, 1998, pp. 181-182). Normally, the specialists in the company are not bothered with the issue, because they are not known to those who need the knowledge. Especially in more complex business structures, the effort to contact the specialist, who may be located abroad, seems not to be compensated by the benefit of owning full information (Davenport & Prusak, 1998, pp. 181-182).

It is important to note, that the transfer of know-how can be intended or unintended. The unplanned way happens during lunch or small talk on the corridor. Here the sender normally shares information, because he is facing problems or ambiguities concerning his or her experience (Schlicher, 2009, p. 347). Further, knowledge transfer can be conducted by communication, personnel rotation, teaching, watching, technology transfer, reverse engineering, replicating resources, scientific articles, presentations, exchanges with suppliers and customers, and alliances with other inter-organizational relationships (Agrote, et al., 2000, p. 3). However, the transfer of knowledge depends strongly on the prerequisites in the company. According to Brijs, the preconditions for exchange of knowledge are, first, reciprocity: a person who is taking information from another, should in return give interesting insights to the information provider. Second, a long-term perspective: the strategic prospect motivates the individual to admit the value of interdisciplinary research and spread of knowledge. Third, the lesser the hierarchical levels knowledge has to be passed through, the fewer the filters of information from one level to the next one (Brijs, 2013, p. 36). Additional factors which are essential for sharing knowledge efficiently, are basically communication, understanding of problems, personal traits, control, organization, negotiation, and non-verbal communication (Mykytyn, et al., 1994, pp. 103-104). A further vital feature in knowledge transfer is mentioned by Politis and depends on the capabilities, education and character of the person who will transfer the knowledge (Politis, 2003, p. 56). Anyhow, the persons, owning the knowledge, shall not be centred too much in the system.
of knowledge management. As Davenport & Prusak are arguing that there are a lot of companies which are perceiving activities in knowledge management as hard to control. Thus, they rather focus on hiring intelligent people than on knowledge management, assuming that they will deliver the outcome the company needs in order to achieve the objectives (Davenport & Prusak, 1998, p. 115). These companies are risking the high costs of not knowing when they are not making use of the knowledge or do not generate new knowledge they will lag behind the competition (Bourdreau & Couillard, 2006, p. 26).

Companies have to take actions, in order to protect their knowledge. The establishment of the KMS is advisable to fulfil the role as enabler to maintain the positioning on the market by protecting, generating, and applying knowledge. In addition that is crucial, when processes, departments, or methods of business units should be analysed. The transfer of knowledge to the business analyst should always be a mixture of stored knowledge and personal communication. The time-restriction, and the employees' ability to educate and explain complex issues in a simple way, are limiting the analyst's actions as well as the employee's engagement in the knowledge transfer process. Still, there are further difficulties to overcome with the purpose of enabling an effective knowledge transfer.

4.1.3 Barriers to effective knowledge management and approaches to overcome them

Various barriers to effective knowledge management disturbing knowledge transfer have been identified in the literature. These barriers need to be taken into consideration when expecting knowledge transfer between employees and during the supervision of the KMS.

The strongest barriers to knowledge transfer can be found in human behaviour. Thus, the individual with its needs, attitudes, and sensitivities is the critical success factor to create a KMS which supports the business objectives effectively (Schwarz, 2009, p. 125). The only technical problem which was identified in a study over twelve different barriers, is an ineffective IT infrastructure (Probst, et al., 2006, p. 292). The most frequent reason of insufficient storage of information or transfer of knowledge is lack of time (Sturz, 2010, p. 500), (Schmidt, 2009, p. 121), (Probst, et al., 2006, p. 292), (Barratt-Pugh, et al., 2011, p. 87), (Davenport & Prusak, 1998, pp. 195-196). This excuse can be underpinned by three different arguments. First, the concept of productive work may be defined too narrowly, so that the documentation or transfer of knowledge is not perceived as productive (Davenport & Prusak, 1998, pp. 195-196). Second, the complex environment of project work results in a haze, where various projects need to be managed simultaneously. As one hot phase may be replaced by another, there is no time to
express the knowledge collected (Sturz, 2010, p. 500). Third, changes in KMS are not taken seriously, thus, employees tend to perceive the instruction to enter knowledge into the system as a burden which wastes time (Schmidt, 2009, p. 121).

Another problem, frequently identified, is that interacting in the information era and a knowledge-based society do not mean that the knowledge owned is common or well managed. Rather it is owned and kept by individuals, using it to take a powerful stand. This behaviour is negatively affecting the employees, the company, and the whole society (Schwarz, 2009, p. 121). It can be evoked by the general mind-set that knowledge means power (Probst, et al., 2006, p. 292). When employees tend to keep their knowledge, to avoid that peers use the shared information to put themselves into a more empowered position (Sturz, 2010, p. 500) or when management rewards a knowledge owner with gaining status (Davenport & Prusak, 1998, pp. 195-196), the result may be a corporate culture which follows the attitude "information is power" (Brijs, 2013, p. 213). That leads the attention to the next barrier which might hinder the effective usage of the KMS.

The lack of motivation might be the reason why employees do not actively use the KMS in order to collect and exchange know-how (Davenport & Prusak, 1998, p. 217). The reason most often mentioned for shortage of motivation is the absence of incentives to share knowledge (Probst, et al., 2006, p. 292), (Barratt-Pugh, et al., 2011, p. 87).

The qualifications of the employees to use the system are lacking often as well. The information needs to be categorized to ensure that the searching method is able to recover it. So the employee, who has to store the information has to find the most general key word which may be difficult from his proficient perspective (Sturz, 2010, p. 500). In addition, the system will be developed over time with the purpose of optimization. If trainings are insufficient at the high speed of development the employee loses the ability to use the system adequately and will become discouraged (Barratt-Pugh, et al., 2011, p. 87). Thus, a free flow of information will be facilitated by theoretical and applied trainings at the workplace (Davenport & Prusak, 1998, p. 217).

Another often mentioned barrier is the intolerance against failures and need for help (Davenport & Prusak, 1998, pp. 195-196). There seems to be an issue about reports on failure or claims and especially bad news which are not entered in the system, due to internal policies or corporate culture (Sturz, 2010, p. 500). The report of failures is often not perceived as a valuable source in
the KMS (Barratt-Pugh, et al., 2011, p. 87). This prohibits the possibility for optimization and learning from failures which is the most valuable and critical source of knowledge (Sturz, 2010, p. 500). Additionally the fear of using the knowledge as control instrument is evoking resistance against the KMS (Schwarz, 2009, p. 121).

Another problem often occurs due to the global and complex corporate structure. When the counterparts in knowledge transfer are not brought together physically, the exchange of knowledge can be endangered seriously, because the sharing of experiences require personal contact to be transferred to an applicable extent (Davenport & Prusak, 1998, p. 200). Additionally, the inability of trust-building can make the transfer of knowledge impossible. People from the same working environment tend to achieve a better understanding, although located in different countries, than people from different professions (Davenport & Prusak, 1998, p. 200). This can be explained by the type of professional language or frame of reference the counterparts are using (Davenport & Prusak, 1998, pp. 195-196). Without this common ground of understanding, it is impossible for the counterparts to establish trust, as no relation can be built between them (Davenport & Prusak, 1998, pp. 197-198). But there are further problems which originate in the communication conditions. The receiver of knowledge may not be capable to understand the information, or groups may think, that the knowledge is none of their business (Davenport & Prusak, 1998, pp. 195-196). In international contexts, the fear of cultural misunderstanding is often the reason why KMSs are not used adequately (Barratt-Pugh, et al., 2011, p. 87). The influence of culture on the transfer of knowledge should not be underestimated, as it may rise strong barriers to the knowledge transfer (Davenport & Prusak, 1998, pp. 195-196).

Summarizing the barriers to effective knowledge management to the lack of time, incentives, and qualification to exchange knowledge, the linkage of knowledge to power, the deficient of failures and bad news shared, and the complex corporation which drives cultural differences, it should be investigated how these barriers can be overcome.

In corporate cultures where knowledge is linked to power, instruments should be implemented which can change that approach into a knowledge-oriented culture, in which knowledge is perceived as a high value, and existing processes and knowledge are not accepted as given, but as improvable (Brijs, 2013, p. 213). For a successful business analysis such a culture needs to be transformed into a "knowledge is the only asset you can develop by sharing it"-one. The management shall lead as example, by delivering information to departments in a faster and more credible way. Anyhow, in order to change the culture, the employees shall get used to the
practice that the information shared internally will be rewarded with another insight from the counterpart (Brijs, 2013, p. 213). One measure can be to foster trustful relationships between employees which enable sharing of knowledge with the purpose of a balance between taking and giving. (Wolter, 2009, p. 78). Thus, the manager will communicate relevant information to their subordinates. By doing so employees feel integrated and part of the business. It is an evidence of trust which managers give to staff members. In trustworthy relationships knowledge sharing is working better (Wolter, 2009, p. 78). In the knowledge-oriented culture, questions and failures are not seen as weakness but a chance to enlarge the knowledge. At the same time employees trust in the fact, that communicating mistakes is not punished and communicating knowledge is rewarded by management. Giving the possibility to communicate knowledge across departments and resources for creativity, reflection, and innovation makes the knowledge work part of the daily operational job. (Wolter, 2009, p. 78)

In the minority of companies, where knowledge exchange forms part of the corporate culture, the leadership style is democratic and the corporate structure is not complex (Brijs, 2013, p. 35). A traditional top-down hierarchy is not productive for knowledge management as it hinders employees in individual thinking, unfolding their creativity, and being initiative, while modern organizational structures, based on teamwork, self-managed teams and overlapping responsibilities, enables knowledge sharing and generation (Bourdreau & Couillard, 2006, p. 28). A free flow of knowledge will be facilitated by less organizational hierarchies (Davenport & Prusak, 1998, p. 217). Factors which might motivate to use the system are a high tolerance towards risk-taking and a human resource policy which favours applicants due to their abilities and attitude towards learning (Davenport & Prusak, 1998, p. 217). Further factors enabling the application of a KMS are the establishment of a change management accompanying the implementation and usage of the system, including trainings at all levels and units, so that every management level displays its participation in the usage of the KMS (Barratt-Pugh, et al., 2011, p. 93). These trainings have to be executed on a frequent basis in order to cope the gaps, created by system development. Moreover, the colleagues will be more concerned about the KMS and the trainings which will create awareness and is crucial for the successful usage of the system (Probst, et al., 2006, p. 292). In addition, a reward system can be set into action in order to motivate employees to share knowledge (Barratt-Pugh, et al., 2011, p. 88). Thus, for the purpose to overcome the barriers to effective knowledge transfer, changes in corporate culture and hierarchies are not sufficient. A training of usage is essential because information entered has to
be stored according to a certain structure in order to be regained. If the information cannot be recovered, the employees are discouraged of entering information (Sturz, 2010, p. 500). Therefore, employees need to be trained and practice with the KMS in order to become familiar with the system and ensure an effective handling. Furthermore, open communication is needed which allows criticizing and sharing knowledge without the fear of an inconvenient feedback. Management has to delegate responsibilities, as employees tend to have more detailed information to be stored in the system. Additionally the boss has to act by example and motivate employees to share knowledge which can be done by giving incentives and rewarding shared information.

The discussion shows, that most of the barriers can be overcome by management strategy, once identified. Anyway, to overcome the barriers it is not enough to set up a strategy struggling against human behaviour. Still, the power knowledge is providing to employees is perceived as so high and the lack of time to share knowledge is a real problem in organizations, who are competing against low labour markets, that the KMS will not be used according its purposes. Nevertheless, there will be documented knowledge in the company displaying organizational structure and core processes. Thus, the business analyst should quickly check, what information can be gathered from the KMS and proceed to the next source of information. That leads him to communicate with employees and management in order to identify knowledge owner and gather the information needed for the analysis.

4.2 The role of communication in carrying out a business analysis

As indicated above, it can be assumed that the role of communication in business analysis is both, a basis for a trustworthy relationship between employees and the business analyst, and the tool to enrich collected information with more details. Thus, communication can be investigated from various perspectives. In this paper the focus will be set on internal corporate communication, because the system applied under this term, can be used during business analysis. Evaluating and understanding the corporate communication system enables the analyst to estimate, to what degree undocumented knowledge can be recuperated.

As Silver states, the term communication is originated in the Latin word "communis" which means sharing. As the rational of communication lies in the need for information about a situation, it is essential to share information with the purpose of making decisions (Silver, 2014, p. 75). Jethwaney states that a corporate communication practitioner who provides critical and current information to the management, enabling it to react immediately to market development, can
only be successful, if he or she is completely familiar with the core competencies and values of the company. This includes market and competition, the unique selling proposition of each brand, the research and development actions, the price building, the entire mission of corporate governance, the corporate social responsibility, and relations between employees and HR policies (Jethwaney, 2010, p. 18). In order to use the corporate communication system, it is essential to understand its functionality. This includes, according to Belasen, the policies, rules and standard procedures of communication, the communication roles and the transmitters of information, as well as the communication media and channels, and the degree of communicating culture, and decision-making systems and goals (Belasen, 2008, p. 199).

The lived corporate communication system needs to be understood by the business analyst with the purpose of using it for both, to gain additional information which is needed for starting business analysis and to establish trustworthy relationships to knowledge owners. The analyst needs to be familiar with the ways, the content, occasion and media of shared information, and with the people who are enabling the communication.

4.2.1 Definition and evaluation of corporate communication

Corporate communication is defined here, as the set of actions which are performed by different communication specialists aiming to bring a message over to the target group by choosing the adequate medium and design. The sum of these messages has to represent the corporate identity, foster long-term relations with stakeholders in the globalized environment, and mediate with government and public affairs. This definition is derived from the collection of several definitions made by Jethwaney (Jethwaney, 2010, p. 2). The communication strategy of a company has to be closely related to the corporate strategy in order to be successful (Argenti, 2007, p. 57). An effective communication strategy links the vision and objectives of an organization with its market, sets the measures to reach the goals, and determines the unique character and core competencies of the company, with the purpose of gaining a position on the market which is far away from competitors. In addition, the strategy clarifies the actions and timing performed in order to achieve an adequate growth and be able to react to stakeholders interests immediately (Belasen, 2008, p. 42). The design of the corporate communication strategy shall be set from the most important issue to communicate to the less important facts (Argenti, 2007, p. 49). As the most important part of an organization is its identity and image, most of the companies are focussing on communicating with clients, commonly done by advertisement. Anyhow, there are a lot of other stakeholder groups requiring specific addressing (Argenti, 2007,
The development of the corporate communication strategy requires, according to LeMenager, the adaptation to the environment. There is no standard concept which might be applied. Rather the management has to consider the companies' position in the industry and towards its competitors, identify the factors resulting from the SWOT-Analysis and considering the history of the company and its senior management style. Especially important are the expectations of the stakeholders - in particular the customers. The communication strategy with its channels and media can be derived from such information (LeMenager, 2013, p. 234).

Anyhow, many companies still fail in communication, because the structure of their cycle of actions does not allow a concrete communication strategy (Silver, 2014, p. 65). Information is coming up from certain situations the company is acting in and cannot be distributed in a standardized process or via a common tool. In addition, the consultants for corporate communication are not familiar with the complexity the communication concept is facing (Silver, 2014, p. 65).

The best way to improve the communication of a company is to train its members in critical communication skills, as reading, writing, and analytical thinking. A workforce which is able to communicate effectively is crucial for the purpose of having the right information at the moment of decision-making. In addition, the education of employees in relevant topics, apart from communication, will broaden their focus, and enables them to think and communicate on a higher quality level (Silver, 2014, p. 141). In any case, the education of communication professionals is quite complex, as one person has to understand the relation between business and communication strategy, the relevant growing globalization issues, and prioritize and carry out effective communication in the new global, complex, and multidimensional environment (Louhiala-Salminen, et al., 2013, p. 148). Thus, professional communicators are facing an enlarged set of requirements on their job as globalization and diversity are making information flows more complex and broaden the audience to an international level (Argenti, 2007, p. 57). Therefore the communicator has to know its culturally diverse audience and while remaining as open and frank as possible with the purpose of achieving effective communications. This is especially important for managers, as they may drive the success of the team or organization by acting as an example communicator (Silver, 2014, p. 57).

As the image of a company depends strongly on the corporate communication, conducted by management, it is crucial that managers speak about the organization and treat its different stakeholders according to the corporate identity (Jethwaney, 2010, pp. 102-103). Anyhow, she
further states that the management, will be advised by a professional communication department which is directly assigned to the management board or by specialists which can be spread over various departments, closer to the issue they are communicating (Jethwaney, 2010, p. 12). As the communication job requires a special degree of understanding, intellect, and skills, these specialists are often brought together in a central communication division. Other departments which bring up their issues to be communicated, will have a clear contact person there. This facilitates communication in general (Jethwaney, 2010, p. 12).

There are four mayor functions of corporate communication identified in the literature which can work interrelated and overlapped within a company. Every function has to transmit the corporate vision and objectives (Argenti, 2007, p. 57), (Jethwaney, 2010, p. 13). Depending on the stakeholder group, the strategy for communication is based on different purposes and designed according to its target group (Belasen, 2008, p. 32). Belasen names these four functions media relations, investor relations, government relations, and employee relations. Media relations are delivering the corporate identity to the customers (Belasen, 2008, p. 32). Investor relations display the companies' prospect and performance and tries to convince the receiver of the potential profit of an investment (Belasen, 2008, p. 33). Government relations influence the governmental decisions and can be crucial to its success in the competition (Argenti, 2007, p. 56). Employee relations aim at making employees understand the strategic objectives and marketing strategy in order to shape a consistent image on the market. In addition, frank communication between management and employees is crucial to maintain trust and loyalty of the staff (Argenti, 2007, p. 54). Employee relations should be fostered by management communication. The objective of this communication strategy is to attract and retain a high skilled and motivated staff.

Taking under consideration the diversity of the workforce, the communication media and information will be selected to address each group according to its preferences (Belasen, 2008, pp. 34-35). Nevertheless, in the changing environment, the evolution of communication media, messages and circumstances frequently need to be taken into consideration, while defining the communication policy of a company (Silver, 2014, p. 139). In addition, the growing number of interfaces which arise in the complex company's structure and its environment evokes the risk of contradictory messages in communicating the corporate identity, vision, and objectives (Zerfass & Franke, 2013, p. 119).

Therefore, a close and strict communication policy is needed in the company in order to preserve the position on the market. These explanations and approaches for an analysis of the corporate
communication system provide the separation of external and internal corporate communication as well as insights on the communication strategy and the important role, managers are playing in corporate communication. As the business analyst has to use the internal corporate communication system in order to gain essential information and build up trustworthy relationships to knowledge owners, this part of the strategy will be centred.

4.2.2 Internal corporate communication

Internal corporate communication is the task of putting diverse people from various professional backgrounds, hierarchy levels, and cultural values on a common ground, with the purpose of understanding the corporate objectives (Jethwaney, 2010, p. 105). In the last decades the importance of internal corporate communication rose constantly, because companies focused more on the communication with employees, instead of setting customers in the centre of communicative actions. A study by Watson Wyatt found, that the potential profit a company can realize by effective employee communication, overcomes the profit realized by customer communication (Argenti, 2007, p. 137). It is commonly known, that the effective communication by management is essential in order to connect with employees, motivate them to realize the organizational goals and interpret these as their personal objectives (Jethwaney, 2010, p. 99), (LeMenager, 2013, p. 232), (Karanges, et al., 2014, p. 343). Thus, the major objective of internal communication is to ensure, that employees feel identified with the company. This requires, that management includes employees by sharing information in a professional way (Argenti, 2007, p. 140). Therefore, the conversation with employees needs to give identity by clearly communicating the vision, goals, and values of the company (Belasen, 2008, p. 101).

As employees are higher educated, and more motivated to understand the whole business, they tend to understand the company to a closer extend nowadays, and therefore are requesting to be actively involved in the conversation about organizational changes (Argenti, 2007, p. 138). With the purpose of keeping them motivated to contribute to the company's objectives, it is essential to let them participate in the evolution of the organization. Giving staff members the possibility to communicate their opinion, should be a two-way communication which requires that management will consider the suggestions made by employees (Argenti, 2007, p. 138). Thus, the intention to establish and use an internal communication system in order to exchange insights with colleagues from other departments may already exist in employees minds. Therefore, it should not be too complicated to make employees feel constructive and important in the business (Jethwaney, 2010, p. 105).
In addition, a regular feedback and transparent promoting policy is a healthy basis for the establishment of trust in the organization (Belasen, 2008, p. 101). In the ideal case, every department shares best practices for bringing over high level messages to the staff in the relevant areas. Knowing the particular fine distinctions of the colleagues enables the adjustment of tone and language used to transfer the message (Argenti, 2007, p. 141). The best conditions an internal corporate communication system can meet have been researched by Young & Post in 1993 and were cited by Belasen. There are eight rules enabling effective internal corporate communication. The managers shall be communication champions; the organizations shall have consistent values in use; communication shall take place in two directions focusing on upward communication; support face-to-face-communications; make sure to share good and bad news; know the customers, clients, and audiences; take differences into consideration; and support communication activities between employees (Belasen, 2008, p. 110).

To structure the internal corporate communication, a company needs an organizational communication chart which indicates how communication shall flow within the company (Perkins, 2008, p. 98). As the communication of a company is a critical success factor, managers have to consider the value of effective communication in order to lead the company to success (Perkins, 2008, p. 98). This includes that team leaders have to check which leadership style will result in the most effective way of performing the team tasks. This leadership style should enable effective communication (Perkins, 2008, p. 99). Thus, the manager needs to be aware of its ability to improve the organization by achieving the own level of comfort and skills, applying the leadership style which will not damage the groups interactions and relations (Perkins, 2008, p. 99).

There are several ways of communication within a corporation. The formal communication is defined in communication policies, tracking systems, evaluation, and complaints procedures which normally is summarized in a manual, available for every employee (Perkins, 2008, p. 103). Before transferring a message or knowledge, it is important to choose the content of the message and to selecting the media to transfer it. The challenge is to pick issues which are interesting to employees. To attract attention, an assortment of success stories by employees and organizational achievements can be used (Jethwaney, 2010, p. 109). The choice of media should be adopted to the group of employees to be reached, as the communication channels and media differ between the departments. Examples are face-to-face contacts, telephone talks, e-mail, instant messages, the internet, the organizational intranet, memos, addressed or unaddressed documents, and official reports (Belasen, 2008, p. 103). Further options are publications, blogs,
video conferencing, brainstorming, events, idea boxes and other channels (Jethwaney, 2010, p. 100). Argenti is describing each of the communication media in a detailed way, emphasizing advantages and application possibilities\(^{14}\). According to the degree of information and the reoccurrence of the information, the adequate communication channel will be selected, if not set by the communication policies. The bigger the corporation, the greater grows the difference between the online connectivity of employees (Argenti, 2007, p. 141). Still, the most effective and appreciated way of communication is the personal contact. Argenti argues, that at least on a quarterly basis, face-to-face meetings with management should be made, to give employees the chance to discuss topics of their interest with the management (Argenti, 2007, p. 144).

Additionally the informal communication plays an important role in information sharing within the company. According to Perkins, informal conversations take place apart from the rules. As this type of communication is perceived as the most valuable one, managers shall facilitate and create occasions to execute small talk during breaks (Perkins, 2008, p. 103). The atmosphere for informal communication shall permit staff members to feel comfortable in the conversation with their bosses, so that they may pose questions and propose recommendations without feeling suspicious (Argenti, 2007, p. 143).

The less beneficial part of informal communication is grapevine which is communicated rapidly and spreads widely. Even though the information is hardly considered to be useful, the majority of the companies is not prepared to treat or use grapevine in the communication policy (Argenti, 2007, p. 151). When employees are not informed in time about changes, they feel the necessity to rely on grapevine and external sources. To prevent this, managers have to communicate constantly with the employees and give them space to share their opinion (Argenti, 2007, p. 151). This leads to another important aspect of internal corporate communication which lies according to Argenti in the transmission of information about major changes, affecting the security of the workplace or changes in the working conditions. These news have to be communicated a long time in advance in order to facilitate that the employee understands the rational and necessity (Argenti, 2007, p. 148). For changes which are severely affecting the corporation, as for example mergers, the timing between internal and external communication needs to be done very precisely. The employee shall not spread news before the press and vice versa. Both cases are

\(^{14}\) See details for e.g. interactive platforms, corporate magazines, videos, memos and letters in (Argenti, 2007, pp. 144-150)
damaging. Either the companies’ image or the employees trust and motivation would suffer (Argenti, 2007, p. 148).

The communication between peers is nearly as crucial for the companies' success as the communication between managers and employees. Blau found that, when a worker discusses his problems with peers, he or she probably receives advice and if not the process of talking may already clarify the thought. In addition, others benefit through information which may be important for their own work. Moreover, sharing problems will motivate other colleagues to talk about their problems as well (Blau, 1974, p. 67). Communication requires awareness and adaptation which grows complex at work, according to the socialization factors, the perception and diversity an individual is facing (Perkins, 2008, p. 55). Additionally, misunderstandings can come up and lead to irritation and distrust. To avoid this, Perkins is advising to apply 5 essential keys in interpersonal communication at work. First, "be the person you want to work with". By this statement she refers to the mirror message of self-worth which encourages peers to treat you in the same way you are treating yourself. In short, be positive and self-confident, so people will react with positive energy and respect (Perkins, 2008, pp. 56-60). Second, "choose the right people and make the right connections". Referring to the relationships you are interacting with, this order gives advice of how you let people influence your life and how we define these influences (Perkins, 2008, pp. 61-66). Third, "make room for the other person's reality", refers to the degree of openness we are granting others to explain their way of seeing the world (Perkins, 2008, pp. 67-78). Fourth, "consistently engage in active, empathetic listening". Active listening is needed for most situations at work and requires mind, ears, eyes and memory to be alert and present (Perkins, 2008, pp. 79-84). Fifth, "live and share the platinum rule" which necessitates the ability to understand how others want us to treat them (Perkins, 2008, pp. 84-86).

In result, the internal corporate communication between management and employees is normally standardized by certain policies and communication channels. The important role managers are playing in internal communication shall not be underestimated, because their influence goes further than motivating employees to strive for companies’ objectives. They are able to form corporate identity in the mind of stakeholders and enable employees to interpret corporate objectives as their own goals. The business analyst will benefit of effective internal corporate communication, not least by understanding the system in order to use it efficiently for collecting knowledge. The knowledge available in this communication system is easier to access and closer to complete knowledge, because employees and managers are used to share every relevant
information they have. Additionally the analyst may behave in a way which enables to fulfil the requirements of perfect communication skills and guarantees a successful communication which is able to create trustworthy relationships.

4.3 Definition of trust in professional context

Trust has been investigated by various disciplines from diverse scientific focuses (Kramer & Lewicki, 2010, p. 247). Still, the most cited definition of trust is the one Mayer et al. provided in 1995, when they defined trust as

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\text{the willingness of a party to be vulnerable to the actions of another party based on expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.} \quad (\text{Mayer, et al., 1995, p. 712})
\]

Anyway academic research and studies are additionally providing further definitions. Some are similar while others are including different aspects. Quite closely on Mayer et al are describing. Dietz et al. by trust as a psychological state consisting of the purpose to agree to defencelessness based upon optimistic expectations regarding the meaning or actions of another (Dietz, et al., 2010, p. 10). A similar approach is given by McKnight et al. who explains trust, as the belief in and the willingness to depend on another party, and separates it into trusting intention and trusting beliefs. The intention means, that a person is keen to depend on another in a certain situation. The beliefs refer to the idea that the other person is caring, experienced, sincere or unsurprising in a certain situation (McKnight, et al., 1998, p. 474). Hardin cites Coleman and Gambetta stating that trust is based on rational expectations which's core lies in the incentives of an individual to satisfy the trust another placed upon him or her and the information this individual owns about the other, that makes him or her trust in the other (Hardin, 2002, p. 13). For trust, it does not only matter how a person guesses the other would behave towards him or her, it depends on the willingness of the other person to consider the interest of that person in their action and behave in favour of the other (Hardin, 2002, p. 11). Thus, at an advanced state, trusting in somebody means that a person feels, that he or she knows the counterpart well enough to understand its motivation and attitude towards certain issues (Hardin, 2002, p. 10). An individual may suggest that the other will behave in a certain way, due to the principles, mutuality or egocentricity of the other. While not knowing the other person, one may risk acting towards the other as if to trust, but expectations are needed to give substance to this trust (Hardin, 2002, p. 13). Even though the definitions differ slightly, there seems to be a common ground for defining trust as a psychological
state, in which different factors are forming the individuals' positive expectations on the actions of others (Kramer & Lewicki, 2010, p. 247).

Still, if a person has a motivation to lie, he or she tends to be perceived as less trustworthy (Mayer, et al., 1995, p. 716). Thus, to understand who will be perceived as a trustworthy person, there are three main approaches, representing the opinion that trust is a choice made by reason (Möllering, 2006, p. 11). Möllering introduces these approaches as first, one chooses who can be trusted, but nobody can trust everybody. Second, one tries to find reasons and assess the others behaviour before trust is established. Third, one decides on whether to trust, and performs with corresponding actions to meet expectations and face consequences (Möllering, 2006, p. 13).

Another interesting approach is introduced by Fiocca. By describing trust as the current confidence, that an upcoming action of a counterpart, with whom the individual is in a relationship, will turn out according to its expectations, enables to assume that trust is able to replace information. As trust is evidently related to relationship and it is manifested that trust can substitute direct and present experience by simply predicting it (Fiocca, 2013, p. 363), the individual does not feel the need for making own experiences, when a trustworthy counterpart is able to predict the outcome of certain actions. The last aspect of trust was introduced by Mayer et al. and refers to the two features to build trust upon: proficiency and trustworthiness. Competence can be identified as a feature of trustworthiness. A proficient person is generally perceived as trustworthy. As no one can be competent in all areas of life and work, trustworthiness depends on the sector or issue treated (Mayer, et al., 1995, p. 717). This implies that the business analyst may be trusted in a department which he or she is familiar with. But in another department it is more difficult to establish a trustworthy relationship due to the lack of expertise and expert knowledge.

To close this discussion, the definition of trust is widely investigated in academic studies. Still, there is no common definition found although the one provided by Mayer et al. seems to be the most popular. This definition fits well in the context of the relationship between the employees and the business analyst during knowledge transfer. Anyhow, it provides no suggestion on how trust can be established between two persons in a fast changing environment and under the time pressure of short business relationships. The definition of trust will be enhanced by presumptive-based expectation, initial trust, and fast trust. Each of which will be elaborated in the context of establishing trust as a business analyst to enable knowledge sharing.
4.3.1 The role of trust in knowledge sharing

The willingness of employees to share their knowledge with the business analyst depends on the degree of trust, the analyst was able to establish during communication with the knowledge owner. The challenges and hurdles which occur during trust formation for knowledge sharing occasions, needs to be investigated. In order to understand the role of trust in knowledge sharing, various scientific models and surveys have been conducted.

Chen and Hung point out that the sharing of knowledge is such an issue to companies because it is hard to identify who owns what kind of knowledge. It is obvious that the process of knowledge sharing engages a person or group looking for knowledge and a person or group identified as the source of knowledge (Chen & Hung, 2010, p. 226). As the knowledge seeker and the knowledge owner were normally separated locally at the moment the knowledge was needed, the challenge to companies is bringing the two sides together for an effective exchange (Chen & Hung, 2010, p. 226). Thus, the requirements for innovative technology and compatible equipment on the ICT market drove the evolution which enabled companies to build up virtual communities, like bulletin boards or news groups which can be used by both, the individual seeking for knowledge and the one, who offers its knowledge. By entering the virtual communities, an individual is aiming at finding solutions, enhancing own skills, obtaining specialized know-how, creating innovations, and protecting knowledge (Chen & Hung, 2010, p. 226). As individuals are spread over different locations, work together in teams, perform interdependent tasks, and share responsibilities for a common outcome, the only effective way of communicating in these structures is a reliable ICT (Staples & Webster, 2008, p. 617). Anyhow, Bloomqvist argues that the speed on the ICT market is accelerating because information about new technologies can be spread globally and immediately, using global networks and thereby making the information exchanges more complex. In such fast developing markets, a competitive advantage is perceived as temporary, so that the company needs to observe the environmental speed and global competition closely (Bloomqvist, 2005, pp. 130-131). Under that pressure, it is perceived as difficult to establish relationships, because market actors appear and disappear rapidly. Nevertheless, the need for trust is still inherent in every business interaction. (Bloomqvist, 2005, pp. 130-131). Thus, the traditional type of trust, based on long-term relationships, no longer seems to be valid in the fast moving business environment. Therefore, the concepts of initial (McKnight, et al., 1998, p. 474) and fast trust (Bloomqvist, 2005, p. 131) will be introduced later on.
While discussing the barriers to knowledge management, some personal factors hindering knowledge sharing have been indicated already. According to Levin & Cross, academic studies, business literature, and personal experiences found that relationships are crucial in order to generate new knowledge, find out how to conduct the work and find solutions to complex problems (Levin & Cross, 2004, p. 1478). Researchers state that there seems to be a correlation between the duration of relationships with peers, so called strong or weak ties, and the extent to which they share their knowledge (Levin, et al., 2002, p. 1). While strong ties may lead to greater exchange of useable knowledge, as the knowledge seeker will communicate frankly until he or she surely understands the new knowledge (Levin & Cross, 2004, p. 1479), weak ties which are providing relational and structural benefits will facilitate new information, because the likelihood to deliver redundant knowledge is very low (Levin & Cross, 2004, p. 1480). Hence, effective knowledge sharing seems to require a relationship between the two actors. This is confirmed by further studies, arguing that the duration of a relationship between a knowledge seeker and a knowledge owner determines the professional and personal trust regarding the delivery of useful knowledge. Still, professional trust is more important in short-term relations, while for long-term relations personal trust gains importance (Alexopoulos & Buckley, 2013, p. 381). Thus, trust is facilitating a powerful coordination and mobilization method for effective knowledge exchange relationships in business (Alexopoulos & Buckley, 2013, p. 362). A trustworthy relationship between colleagues helps to communicate frankly and enables distribution of knowledge (Politis, 2003, p. 64). In addition, managers shall form part of the team by integrating their expert knowledge and share it with the team members with the purpose of building up a trustworthy atmosphere which could be crucial for the attitude towards knowledge sharing within the team (Politis, 2003, p. 64). Thus, in a trustworthy environment employees and managers are able to unseal information, relax controls, and admit influences and interdependencies. When the counterparts are behaving according to the expectations of others, relationships can be enforced and create stronger reciprocated trust (Dietz, et al., 2010, p. 11).

Individuals who trust one another will provide significant, complete, precise, and timely information and deliver realistic data to the solution development process. They contribute to enforcing social security and will not interpret the intentions of others negatively (Zand, 1972, p. 231). Furthermore, groups cooperating on a high level of trust are focusing more on the problem itself than on socially generated uncertainty which allows them to solve problems more effectively (Zand, 1972, p. 238). Therefore it can be assumed that trust leads to increasing
knowledge sharing, makes knowledge exchange cheaper, and amplifies the possibility that the employee who gained new knowledge would have understood the knowledge in such depth, that he or she is able to apply it (Abrams, et al., 2003, p. 65). In addition, trust raises the degree of collaboration with the colleague who owns the knowledge, because if the source of the knowledge is perceived as trustworthy or credible the receiver of the knowledge will behave in a less doubtful way and will be more open and receptive to the new knowledge (Szulanski, et al., 2004, p. 601).

Despite the advantages which a trustworthy relationship between colleagues and management bring into the process of knowledge sharing, there are still hurdles to overcome. One aspect to be considered is introduced by Rockmann & Northcraft, arguing that every time information is shared with peers, clients, or business partners the risk of wasting time or losing sensitive knowledge occurs. It is perceived as waste of time, when the receiver of the information is not appreciating or understanding the shared knowledge. The risk of misuse of the received information can be found in giving away secret knowledge or in using the knowledge against the sender (Rockmann & Northcraft, 2008, p. 106).

Levin distinguishes two types of trust as relevant for knowledge sharing. While the benevolence-based trust suggests that a person will not hurt another, even if there is a chance to do so, the competence-based trust refers to the competence of another in a certain area which convinces the knowledge seeker. The two types may occur simultaneously or separately. Anyhow, both are essential for knowledge sharing, because the willingness to help alone does not compensate a lack of competence. Neither can competence without willingness to help lead to successful knowledge sharing (Levin, et al., 2002, p. 2). Thus, if the two parties trust benevolence- and competence-based, trust can also be established rapidly in new relationships with weak ties (Levin, et al., 2002, p. 2). There is even evidence, that weak-ties-relations are more conductive to effective knowledge sharing, because their relationship is not based on a common concept, idea, or environment. People with different perspectives and information can offer a higher potential for solution development (Levin, et al., 2002, p. 3), (Levin & Cross, 2004, p. 1478). Anyhow, strong ties seem still to be very important for seekers of tacit knowledge. As tacit knowledge is based on insights, intuitions and beliefs of the knowledge owner, a higher degree of competence-based trust towards the knowledge owner is needed, than seekers of explicit knowledge will need (Levin & Cross, 2004, p. 1481).
To sum up, effective knowledge sharing depends strongly on the degree of trust the actors in the process offer each other. Even in the fast developing ICT sector, trust is still needed in order to do business and share knowledge on electronic platforms. In addition, trust fosters the relationship between actors which enforces the knowledge sharing effectiveness, because in a trustworthy relationship knowledge can be transferred to such an extent, that the receiver will immediately be able to apply the new knowledge. Not only the understanding is deeper, more information will also be shared in order to develop the best solution as a team. Thus, the business analyst is required to develop a trustworthy relationship to the employees and knowledge owners, with the purpose of starting the analysis with the most complete information possible. Therefore, the analyst needs to understand the concept of trust and how to establish and manage trust in a short period of time.

4.3.2 Establish and manage trust as a business analyst

The need for a business analysis is especially high in companies and markets which are fast-changing and making corporate structures complex. McKnight et al. argue that the changing environment of organizations lead to an increase in the number of temporary teams, project engagements, or task forces in a company (McKnight, et al., 1998, p. 474). Thus, workers are used to get into new groups and deal with new managers on a regular basis. Initial trust is inherent in situations where no long-term relationship could have been established yet (McKnight, et al., 1998, p. 474). Tillmar states that trust is derived from the need to cooperate. Thus, when trust is not yet established but counterparts depend on each other in order to achieve successful collaboration, they tend to base an initial trust on the unknown system, mechanism, or person (Tillmar, 2005, p. 69). Initial trust can be based on a general attitude one person has against others which permits him or her to depend on others. Alternatively or additionally, the person may base initial trust on institutional structures which support the probability of success in a certain situation (McKnight, et al., 1998, p. 474). This approach is described by McKnight as a general willingness of a person to be vulnerable against the actions of others. That kind of trust can be developed during lifetime experiences. Furthermore, he suggests four different factors this type of trust can be based upon. The personality-based trust refers to the faith in humanity which is often developed during childhood, the institutional-based trust can be found in guarantees, safety networks or other structures, and the cognitive-based trust relies on fast cognitive signals, or first impressions (McKnight, et al., 1998, p. 475). In addition, there is an approach suggesting that the trustworthiness at first sight is irrelevant. According to this attitude, the counterparts
should perceive each other as well-meaning and trustworthy, just because they assume, that the outcome of their interactions will always be better when putting trust in the other person. (McKnight, et al., 1998, p. 477), (Alexopoulos & Buckley, 2013, p. 370).

Anyhow, not every person is able to put initial trust in a counterpart. Therefore, in situations where trust is needed, and trust cannot be formed on the traditional basis, counterparts tend to apply fast trust. This concept, introduced by Blomqvist, can help the business analyst to gain the trust of the employees or managers who are owning the information the analyst needs. Still, the counterpart characteristics are essential to be estimated by the analyst (Blomqvist, 2005, p. 133). The knowledge owner should be well-prepared to decide on intuition and to take part in experiments. If so, fast trust can be established by going through the states of interest for the other, understanding the other's perspective, willingness to learn from the other, ability to adapt the own behaviour, and commit to newly generated knowledge (Blomqvist, 2005, p. 133). These steps are indicating that the application of fast trust requires counterparts from different professional backgrounds to step out of their frame. While doing so, they can appreciate the other's culture and context which is crucial for being perceived as cooperative, likeable, interesting, competent, and reliable which enables to predict the actions of others. The second step is to put oneself in the perspective of the other, in order to understand and learn about the others interests and issues which requires analytical thinking and evaluation of knowledge. The third step towards fast trust is to test the reliability of the other by iterative experimentation. Herein, the ability to improvise, find innovative solutions, and create new methods can be tested under the focus of maintaining and creating a relationship with the partner (Blomqvist, 2005, pp. 134-135). This indicates that trust is always depending on the situation as well as on the person's attitude (Blomqvist, 2005, p. 133). Consequently, individuals who are not willing or not able to trust certain persons from the beginning form trust by opening their minds towards the interests and values of the counterpart. If this is done reciprocally, a trustworthy relationship is established within a short period of time.

In contrast, the process of establishing trust can be slow, if trust is neither initial nor fast. According to Blomqvist, especially when the interacting counterparts do not cooperate on a frequent basis, the process can take a lot of time (Blomqvist, 2005, p. 128). Every interaction has to be satisfactory for both sides, in order to build up trust. This period is characterized by iterative investments and experiences, which are reconsidered until the counterpart is perceived as trustworthy (Blomqvist, 2005, p. 128). Additionally, trust is strongly related to time and space
resulting in lower probability of establishing and maintaining trust with persons who are separated locally and interact seldom (Fiocca, 2013, p. 364). Anyhow, as trust is inherent in relationships which require actions and relational work, there are several options to foster trust building, listed by Levin et al.: First, a common understanding of the objectives and interdependencies of an organization is of great value. This can be achieved by communicating from management to peer level, how work should be done and how it is measured and compensated. Second, trust-building-behaviour has to be demonstrated. Managers should give employees the chance to communicate their concerns in a convenient atmosphere, where active listening and encouraging reactions are present. Third, the people should be brought together in order to communicate. In modern global business this can be done in physical or virtual spaces, where employees can interact easily (Levin, et al., 2002, p. 7).

Trust can be established as the result of cooperation. If the outcome of interaction is perceived as positive experience and fulfilment of expectations, the interacting partners will put trust in each other, which is further driving interactions and the level of reliance and exposure between the counterparts. Thus, an individual is starting, determining, nourishing, and shifting trust while cooperating with others (Möllering, 2006, p. 79), (Dietz, et al., 2010, p. 12).

So far, it was investigated how trust can be established in a fast way and what factors are speeding up the trust-building process. Bachmann summed these approaches up in arguing that trust is either based on interactions or on institutions. The interaction-based trust is created through frequent interaction between two persons, building up intimacy and leading to the situation, in which the two find the behaviour of the counterpart foreseeable (Bachmann, 2010, p. 93). The institution-based trust suggests that people tend to trust each other in an environment with a high level of regulations, even without previous interactions. This is based on the expectation that both parties will behave according the rules (Bachmann, 2010, p. 94).

Thus, even if the business analyst is an internal one, it is essential to be familiar with the regulatory framework the knowledge owner uses to operate in. When the formation of trust requires previous information about the counterpart, the so called traditional way of trust building applies. The first step of establishing trust according to this model is to collect information about a person. Levin et al. identify that similarity of the two persons as the most significant factor leading to the decision to trust. In professional contexts this similarity is determined by demographic facts, organizational guidelines, social relationships, and knowledge.
Comparable factors were identified by Dietz leading to the conclusion, that organizational and social likeness are driving the potential of establishing trust.

Building up trust following this concept is identified by Dietz et al. as a totally calculative approach, where the presumptive based trust is formed or rejected (Dietz, et al., 2010, p. 12). The literature identifies four presumptive bases of trust. First, the employees may feel to belong to a common group or organization. Second, the knowledge about another persons' role can replace the need for personal experiences, which are normally required for establishing trust. Third, the reputation of a colleague, does influence the degree of trustworthiness in a positive or a negative way. Forth, trust can be based on regulations and codes of conduct which are actively lived in business routines (Alexopoulos & Buckley, 2013, pp. 366-367). Thus, the information on which presumptive trust is built seems to be commonly identified in academic studies. Kramer & Lewicki also describe the expectations about the identity, the role, and the rules an unknown counterpart might perform as the basis for presumptive trust (Kramer & Lewicki, 2010, p. 260). Kramer and Lewicki are enforcing this statement by citing Gambetta et al. who are arguing that the prediction whether a person is trustworthy or not, depends on the information an individual has according to the personal attributes, social or relational ties, memberships in social networks, and the circumstances (Kramer & Lewicki, 2010, p. 257). Thus, the decision, whether to trust or not is calculative and predictive; calculative, because evidences from various sources are balanced, and predictive because of the future-behaviour assumption, made on the available information (Dietz, et al., 2010, p. 12) about the other person.

Graph 1 shows the process of establishing trust in situations where no evidence from experiences is present. This model was established based on Dietz and Kramer & Lewicki, because the business analyst finds himself under that condition when starting his analysis. Normally the analyst is not able to rely on trustworthy, long-term relationships with the knowledge owners. Therefore, it is essential to understand how the counterparts will be able to put trust in the analyst. Thus, the business analyst shall make sure that the knowledge owner gets as much information as possible to start its presumptive-based evaluation of trustworthiness. In this phase, the support from management can be crucial because it will influence the employees' thoughts about the analyst and his tasks. When only positive information about the analyst is reaching the knowledge owner, the likelihood that the calculative analysis results in the decision that the counterpart is trustworthy is high, and therefore the potential of an effective knowledge transfer is also high. Thus, when the knowledge owner decides to agree to become vulnerable to the business analyst,
he is predicting how the analyst will act in his role and what kind of damage or benefit the knowledge owner can get from the collaboration.

This is when the cycle starts. If the business analyst now behaves in the way the knowledge owner expected him to, the exchange is considered as successful and repeatable. This leads to a growth of trust and further resources will be invested in the relationship, leading to further successful exchange. When this exchange is also satisfactory and fulfils the expectations of the counterpart, the cycle of growing trust will spiral until reaching the state of deep identification-based trust between the two parties. That highest level of trust is described by Dietz as a relationship of two persons who share interests and wishes and are acting with complete understanding of the other, so that they are able to act on behalf of the other (Dietz, et al., 2010, p. 12). To reach this state, a long-term relationship is needed. Thus, the business analyst will not have the time to achieve such level of trust. Anyway, for knowledge sharing a lower level of trust should be sufficient.

Still, this self-enforcing cycle can be broken every time the expectations, which the knowledge owner holds regarding the analyst do not turn out well. In this case, the red arrow indicates the failure of expectations which may lead to the damage of trust. Depending on the duration of the
relationship, this can have severe consequences. The size of the small cycle indicates, that trust may be hurt to the degree that it has to be build up again. Kramer & Lewicki state, that trust repair needs to be done when expectations were spoilt, but a further relationship is aspired (Kramer & Lewicki, 2010, p. 249). In order to enable the business analyst to maintain the degree of trustworthiness he should behave in a certain way. According to a study conducted by Faser and cited by Kramer and Lewicki, there are eight main causes for the damage of trust which have to be avoided by the business analyst. A general disrespectful treatment of colleagues and peers, including blaming others for problems; not listening or not trying to create a common understanding; breaking promises or ignoring rules and discretion; unproductive management behaviour; not recognizing errors or not admitting failures; incapacity to perform job responsibilities; not sharing the common vision and values and showing great differences between spoken word and action; as well as changes in structure, systems and processes may lead to a breach of trust. In general, a violation of trust in an early relationship state is worse and harder to repair than in a long-term relationship (Kramer & Lewicki, 2010, pp. 251-252). Broken trust might be repaired by explanations or apologies. The success of explanations is depending heavily on the characteristics of both parties and calls for additional actions for reparations (Kramer & Lewicki, 2010, p. 253). The effects of apologies need to be investigated further, as there seem to be contradictory approaches of how and to what extent they allow trust repair. Managers are apologizing for their mistakes, as some studies show that the probability of repairing trust by apologizing is still higher than by not apologizing (Kramer & Lewicki, 2010, p. 253). Anyway, a few rules have to be considered in order to make an excuse effective. The apology has to be sincere and immediately, and the person who is apologizing needs to blame him or herself instead of external actors and should take responsibility. In general the likelihood that the apology will be accepted grows with the duration of the relationship between the parties (Kramer & Lewicki, 2010, p. 253).

Nevertheless, the disadvantages of apologizing lie in the undermining of reliability of that person. In addition, the personality will be perceived as weak from that moment on. Thus, the expectations which might be put on that person will be weaker and less resources will be invested in that relationship (Kramer & Lewicki, 2010, p. 254). In sum, excuses need to be strong, credible, and include responsibility for repairing the problem, in order to gain understanding and support by its receivers. Further aspects in trust repair are following Kramer and Lewicki reinstatement of the lost privilege or restructuring of situational conditions, posing regulations, contracts or
supervising systems in order to avoid breach of trust, and sanction it to an extent which prevents trust-damaging behaviour (Kramer & Lewicki, 2010, pp. 255-256). Still, the most important feature in trust repair is forgiveness. Only, if the hurt person is prepared to forgive the violation, trust may be rebuilt (Kramer & Lewicki, 2010, p. 255). After investigating how trust can be established and repaired, some important factors concerning trust during business analysis will be discussed.

As a business analysis normally comes along with changes in the company, analyst and management have to take into account that the maintenance of trust during the whole process of organizational change is crucial, because employees tend to feel more defenceless in times of changes, as the future is perceived as uncertain (Rousseau, et al., 1998, p. 395). Thus, analysts shall concentrate especially on treating the employees, who are most affected by the change in a way which facilitates trust-building. At the same time the management can foster trust-building by communicating relevant information, allowing mutuality of influence in decision-making, supporting self-control, and shunning exploitation of the vulnerability of others (Zand, 1972, p. 238). By doing so, the increased trust in the company can considerably raise the effectiveness of problem-solving intentions of analysts, managers, and employees (Zand, 1972, p. 238). Nevertheless, analysts and managers have to consider the possibility that team members may have decided to cooperate with the intention to take advantage of others or to mislead others through untrue information (Rockmann & Northcraft, 2008, p. 107). Thus, especially in teams, where diverse interest groups are working together, they have to make sure that every team member is convinced that each of them has decided to act in the best interests of the group. They need to trust each other (Rockmann & Northcraft, 2008, p. 109). Therefore, it is crucial to the success of the whole team that trust, knowledge transfer, and creditability is maintained during the cooperation. Still, as Mayer et al. point out maintaining trust within a team can face further difficulties. First, the increasing amount of intercultural teams requires a higher effort to establish trust, because there is no possibility to rely on similar background and experience. Second, the trend in management style towards self-managed teams increases the need for trust within the company, because each team is given more responsibility and control mechanisms are reduced, which leads to further interactions between diverse teams (Mayer, et al., 1995, p. 710). Thus, the business analyst needs to be aware not only of how to behave in order to establish trust. There are further aspects to be considered in the relationships to knowledge owners which may complicate the trust-building within the team.
Concluding, in order to establish trust, the business analyst shall create an atmosphere, in which employees feel free to share their concerns and knowledge and are content with the analyst benefitting from the knowledge the employee owns. With the purpose of understanding the business, the analyst depends on the trustworthy relationships to employees, in particular to knowledge owners. Therefore, in the initial phase of business analysis, the business analyst needs to make sure that his behaviour is fostering his trustworthiness. Thus, the analyst needs to understand how trust can be established by which type of character of the counterpart. This is crucial, because when an analyst is not able to establish such a trustworthy relationship, it will be hard to convince the employees to share their knowledge, which makes it impossible to understand the company and its work processes. If there is no initial or fast trust provided by certain knowledge owners, the analyst has to be prepared that some employees will behave suspiciously against the analyst until a first expectation based on him turns out well. From that point on, trust may increase steadily with every successful interaction.

5 Success factors on initializing a business analysis

Anyhow, with the purpose of carrying out a business analysis successfully, the above discussion shows that a few prerequisites have to be installed in the organizations.

As business analysis depends on the accessibility of current, complete and reliable information, a well-established KMS is of great value to the analyst. When the business analyst is not able to access a KMS, it will takes him more time to gain the information needed in order to understand the current issue and the risks of future trends. Elmhorst point out that the communication policy in the organization is important. The established knowledge documentation or process instructions which may be distributed via a platform for communication, are crucial for the success of the analysis (Elmhorst, 2011, p. 243). Herein the attitude towards knowledge sharing and information exchange is essential for the analyst's success. In a company, where employees are not willing to share information, the analyst is neither able to understand the entire business processes with its strength and weaknesses, nor the situation which might be considered as problematical by the company.

During the information search, the current situation and future developments need to be considered in order to design possible solutions which will be valid under the upcoming changes. If the future dimension is not regarded in the solution, the risk of being obsolete before implementation is high (Schmidt, 2009, pp. 73-74).
While examining the information the analyst needs to take all relations and interfaces between the business units into account, as well as how the interdependencies are influencing their success. This analysis shall be done from the outer group to the inner unit (Schmidt, 2009, p. 132). Thus, from a general management perspective, keeping in mind the main targets of the corporation detail information and small tasks can be understood in their context and evaluated according to the companies outcome. Nevertheless, the analyst needs to deal with every small process in order to examine its interactions with other tasks and the effects on the achievement of corporate objectives.

As discussed above, the initial phase of a business analysis is determining its success. In this period, the business analyst needs to understand the business processes, the supply-chain, the interdependencies, and social constructs within the company as deeply as possible. Thus, the analyst depends on the information the management and employees are providing, in order to comprehend the complete picture. Still, the analyst has a crucial influence on the process of knowledge sharing which can be found in his behaviour. According to Chun et al., the ability of acting and reacting emotionally reflected enables to recognize the feelings of others and to use this information to create a comfortable and constructive relationship. Creating emotional bonds, based on exact emotional understanding, can be the first step toward establishment of trust (Chun, et al., 2010, pp. 426-427). Thus, emotional intelligence should be a requirement on hiring the business analyst. As the above discussion shows, the need for a trustworthy relationship between employees and the business analyst seems to be crucial for knowledge transfer and drives the success of initiating business analysis. In order to be perceived as trustworthy Abrams suggests that the analyst should follow the ten rules of behaviour listed below. Keep confidences, align talk and action, communicate frequently providing rich exchanges, engage in constructive dialogue, make transparent and fair decisions, create and use a common language and strive for a common vision, make trust to a corporate culture objective, connect persons instead of roles, give valuable knowledge without expecting anything in return, assess accurately which entity possesses what kind of knowledge (Abrams, et al., 2003, pp. 65-66). It is also important that the business analyst understands the core values and behaviours of the group he is working with because trust is often built up on identity, including shared norms and values. This enables the analyst to be accepted as trustworthy in the group which further facilitates open communication, in which effective knowledge transfer can be conducted.
In order to understand the stakeholders' needs, the analyst should be familiar with the corporate culture. This may enable to realize how the business unit is interpreting the particular situation which further facilitates to make an adequate proposal of solutions with benefits for both sides. Avakian et al. suggest to act according to the corporate culture which may allow the analyst to manage conflicts that may occur on interpersonal level (Avakian, et al., 2010, p. 133) during solution design and implementation. Thus, the business analyst needs to adjust his or her general analysis-tools to find solutions for the particular situation which are fitting the corporate culture. They state that it is further essential, that the formal structures and strategic actions are closely adjusted to the culture, because the analyst will lose the trust of employees or business units when the solutions seem to be not completely satisfying their interests (Avakian, et al., 2010, pp. 152-153).

To sum up, in the initial phase of a business analysis the analyst needs to understand the whole company and its processes. In order to do so, a well-established KMS, can be a crucial source of information to the analyst. While analysing the KMS and process documentation, analytical skills and core knowledge about the sectors' processes are essential skills the business analyst shall possess. As the KMS can never represent a complete picture of the business and its interdependencies, another success factor of the analyst is a high degree of social and communication skills. These are crucial to talk to employees and create trustworthy relationships which lead to the last critical success factor on initializing business analysis. Only a trustworthy relationship is animating the employees to share confidential or critical information. Without this information, the business analyst will not be able to understand the whole business problem, making it impossible to design and develop adequate solutions, in order to lead the company out of the critical situation which encouraged the management to hire the analyst.

6 Conclusion

Corporate structures are growing global and complex driven by hybrid and individual customer needs and fast changing preferences. The required flexibility of organizations leads to networks in which every business unit is specialized on certain tasks of the global value chain. The evolution of organizational structures into complex conglomerates requires a close coordination between the business units, with the purpose of optimizing the corporate outcome to maintain the competitive advantage. This coordination involves entities, managers, and board members from diverse companies and can be facilitated by advanced ICT solutions. Managers have to consider the trade-off between responding to intertwined complexity drivers by further expansions or more precise
division of labour and the effort of coordinating between units in each strategic decision in order to manage the complexity of the company structure. Such decisions and the resulting need to bring the entities together to a common value system and effective process alignment often requires the support of business analysts. By conducting a business analysis, management will be supported in decisions' preparation with predictions about consequences of considered strategies, because the analyst possesses a throughout knowledge about interdependencies. This facilitates the design, implementation, and promotion of changes in the company.

Still, the management shall define the role, tasks, and requirements on the business analyst precisely in order to select the right person capable to gather and deliver relevant information and push designed changes through all departments. Due to the changing environment and the technological progress, the analyst needs to be familiar with IT solutions as well as business problems. In addition, a proficient communicator is needed, to negotiate with the diverse counterparts the analyst will cooperate with.

In order to understand the business and its work processes the analyst has to consider the competitive advantage, the image, and the future perspective of the company. Additionally, the whole internal structure and interdependencies as well as authorities and decision-making processes are essential information to start business analysis. In order to gain such knowledge, the analyst can rely on various sources. The KMS is both, it can make the business analysis more efficient and effective, and it is an enabler to create and maintain the competitive advantage. If the KMS is actively used for knowledge sharing and protection, the analyst has to check whether the knowledge stored is helpful for the topic to be analysed. Anyhow, to achieve these advantages, many barriers in human behaviour need to be overcome. Thus, the analyst will rely on communication with employees and management to gain the required knowledge. While KMSs are less common in organizational practice, internal corporate communication policies do widely exist. Such a policy has to be aligned with the corporate strategy in order to communicate the corporate identity to stakeholders, motivate employees and foster knowledge exchange within the corporation. When the business analyst is a professional communicator and familiar with the internal corporate communication policy, he will gain both from communication, the additional information needed to understand the business, and a trustworthy relationship to knowledge owners. A business analyst who is able to apply the concepts of presumptive-based, initial, and fast trust will succeed in effective knowledge sharing in the fast changing environment. In a trustworthy relationship deeper understanding, more information, and better solutions can
be achieved, permitting nearly complete insights and knowledge at the starting point of the business analysis.

The investigation can be concluded with the results, that the success of business analysis depends on the throughout understanding of the company, its processes, and interdependencies by the business analyst. Under the conditions of the fast changing environment on the global market, a flexible corporate network is crucial for immediate reaction to customer needs. These complex companies’ structures are slowing down the process of business analysis. Thus, managers should prepare the analysis by implementing a comprehensive KMS which allows the analyst to keep track of processes and changes in the environment. In addition, open and frank communication is essential to share knowledge and create a trustworthy atmosphere in the company. To thrive, the business analyst needs to be emotionally intelligent and capable to fit in and find solutions according to the corporate culture.

This study demonstrates a linkage between the success of the business analysis and knowledge management, communication, and trust. There is a need for further studies on the direct and indirect influence of a trustworthy relationship between business analysts and knowledge owners. Additionally it has to be investigated how many companies are really using a knowledge management system in order to improve processes and respond to changes in the environment. Still, the role of trust in knowledge sharing and in communication has been analysed fundamentally in the literature. The business analysis requires knowledge which can be gathered by communication and both, knowledge sharing and communication require trust to be successful. The challenges a business analysis is facing in complex organizational structures identified here are the preparedness of the company for conducting an analysis and the necessity to establish trust under difficult circumstances, with the purpose to succeed in communicating knowledge.
V. List of References


VI. Declaration of Originality

This paper was written by the author only, with only the aid of disclosed sources, which have been explicitly marked throughout the text. Complete references are depicted in the list of references. This paper has not, either in part or as a whole been used in any other context before.

Hamburg, 09 February 2015

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Kerstin Sindt

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