PERCEPTIONS OF KNOWLEDGE AND ITS MANAGEMENT IN MULTINATIONAL CORPORATIONS

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Abstract

Knowledge Management has been under scrutiny by academics for decades, analysed through countless points of view. There are copious amounts of opinions on what Knowledge Management is, what could or should be, what direction is it headed, and so forth. Yet, with extremely limited exceptions, the academical world seems to ignore how low the success rate is for Knowledge Management initiatives. This paper advances a new theory why the failure rate is so high: differences in perceptions between management and employees are a contributing factor. Stemming from the author's experience as an employee and a gap that was identified in the literature, this paper puts forth a new approach to knowledge management implementation.

Contents

Introduction

"Of more recent times[...]Knowledge Management (KM) has started to emerge as an area of interest in academia and organisational practice" (McAdam & McCreedy, 1999, p. 91). "Knowledge Management has had a meteoric rise. Before about 1995 the term was almost unknown […]. Today, it is familiar in boardrooms […] across the world." (Bartholomew, 2009, p. 5). The subject has been discussed and studied extensively, but by no mean exhausted. McAdam et al. did a review of KM models in 1999 (McAdam & McCreedy, 1999). Matayong et al. took the studies a step further and did a review of the approaches to KM studies (Matayong & Mahmood, 2013). The academics working with Knowledge Management have looked at KM through all sorts of theoretical lenses, scrutinising a plethora of aspects, facets, processes, and factors. According to Bartholomew (2009), "the number of academic papers on [KM] quadrupled between 1995 and 1997, and again by 1999 (Bartholomew, 2009, p. 5). The one aspect almost all scholars seem to ignore is the low rate of success of KM initiatives. This paper proposes a theory as to why the management of knowledge is so difficult to implement and fruitfully exploit, namely that disparities in perception between employees and upper management constitute a contributing factor to the predicament of the task.

This paper has its roots in the author's experiences as an employee, years before having had contact with the scholarly concept of Knowledge Management or academical education in Denmark. It stems from noticing how seldom the views of employees and management are aligned, from discerning a problem in real life, not between the shelves of a library. Hence, despite being a theoretical work, this thesis is anchored deeply in the daily realities of an employee. The main goal of this paper is point out a gap in the literature, develop a theory that

covers that gap, and then describe how this theory is useful in the real world. Although stemming from the past, this thesis has an eye on the future as well, aiming to find practical solutions to a real-world problem, not become another dusty pamphlet on a shelf. While working with highly abstract notions, such as knowledge and its management, the end goal is to solve a practical problem, namely the low rate of success for KM implementation attempts. The author already had years of field experience, witnessing perception gaps in various numbers and sizes, when he encountered the statistic regarding how difficult it is for an organisation to successfully implement knowledge management. At this moment a possible connection was instinctually perceived. The possible correlation between the two was the germinal idea of this thesis, leading to the following problem formulation**: What is the impact of perception gaps on KM initiatives in multinational corporations**?

This paper hypothesises that one of the contributing factors to the difficulty of the task is the people's divergence in perceptions. These perception gaps can occur between all the employees, even if they work in the same geographical location. However, this thesis will focus on the differences in perceptions between upper management and the rest of the employees within a multinational corporation. The domain of multinational corporation (MNC) was chosen for a few reasons. Multinational corporations have large pools of knowledge which needs to be managed in order to be exploited most efficiently. They also have large numbers of employees, which are spread all around the globe, making communication difficult. These factors combined result in MNCs having the biggest challenges in implementing KM, but also the most ardent need for it. Last but not least, the domain was chosen to limit the scope of this paper, allowing a more in-depth analysis, instead of a broad, generalistic view.

1. Setting and definitions.

This chapter will offer definitions to the terms used in the rest of the paper, and the setting in which they are used. Such clarification is required because of the variety of meanings given to the terms throughout the vast corpus of literature written on the subject. Some notions will be used as found in other theoretical papers, but most will be used with some alterations. Furthermore, outlining the terminology helps draw the borders of the domain which concerns the new theory being advanced.

Knowledge management is an extremely complex concept and can be viewed through a variety of frameworks. However, three fundamental processes have received the most consensus: knowledge generation, sharing, and utilisation (Davenport & Prusak, 1998, as found in Zheng, Yang, & McLean, 2009, p. 764). Knowledge generation is the process of acquiring knowledge, whether from outside sources, or created from within (Davenport & Prusak, 1998, as found in Zheng, Yang, & McLean, 2009, p. 764). Knowledge sharing, also called knowledge transfer or diffusion, is the process of transferring the knowledge between individuals or groups (Davenport & Prusak, 1998, as found in Zheng, Yang, & McLean, 2009, p. 764). Knowledge utilization, also called knowledge application or implementation, refers to the process that is oriented toward the actual use of knowledge (Gold et al., 2001, as found in Zheng, Yang, & McLean, 2009, p. 764). As a side note here, 'Knowledge Management' will be used when referring to the academical field, and 'knowledge management' when referring to the management of knowledge in an organisation.

It would take no effort to find numerous other definitions of KM, or even of the three processes; Luo & Lee (2013) differentiate between seven processes, for example. However, that discussion would be far too long, and serve no purpose for the paper's goal. As it will be seen in the next chapters, it is not important how the definition of KM is formulated within an organisation, but rather making sure that everyone shares that definition. This observation is valid for the rest of the definitions chalked out in this chapter.

The task of finding a definition for **knowledge** is no easy one. As it has vexed the world's best philosophers from the ancient times until nowadays, this paper will follow the wise example of Grant, Fahey et al., and Alavi et al., who chose to not delve too deep into it (Grant, 1996, p. 110) (Fahey & Prusak, 1998, p. 267) (Alavi & Leidner, 2001, pp. 6-7). While not taking upon the unresolvable task of defining knowledge, the three previously mentioned authors make a few addendums to it, which will be incorporated in this study. Most important one is Alavi et al.'s, stating that probing, questioning, or reframing the definition of knowledge is not necessary for working with a knowledge-based theory (Alavi & Leidner, 2001, pp. 6-7). Grant offers an admittedly tautological definition of knowledge as being "that which is known" (1996, p. 110). Fahey et al. walk the same path, considering knowledge to be "what a knower knows", and "originating 'between the ears' of individuals" (Fahey & Prusak, 1998, p. 267). They also tie a close bond to the human aspect, by stating that "knowledge is meaningless in the absence of a 'knower' [and] there is no knowledge without someone knowing it" (Fahey & Prusak, 1998).

When it comes to the differentiation between **tacit** and **explicit knowledge**, this paper will adhere to the consecrated definitions established by Polanyi, where 'explicit' refers to knowledge that can "uttered, formulated in sentences, and captured in drawings and writing", and 'tacit'

refers to knowledge "tied to the senses, movement skills, physical experiences, intuition, or implicit rules of thumb" (Erden, von Krogh, & Nonaka, 2008; Nonaka, 1991; Polanyi, 2009). However, when it comes to the relationship between the two, this paper will follow the direction set by Tsoukas, who instead of regarding explicit and tacit knowledge as a juxtaposed, dyadic pair, or the opposite ends of a continuum, he considers them to be "the two sides of the same coin [because] even the most explicit kind of knowledge is underlain by tacit knowledge" (Tsoukas, 2002). According to the same author, tacit knowledge is impossible to be converted to explicit, it can only be displayed or manifested; any attempts to transmute it result in truncating it down to only the explicit parts of it (Tsoukas, 2002).

One excellent sample is Nonaka et al.'s example of how the bread-making machine was engineered (Nonaka & Takeuchi, 1995). In that instance, the master baker's tacit knowledge of dough kneading was captured and translated into explicit knowledge in the form of the bread machine, or at least, that's how the authors view it. However, if a person buys that appliance and uses it, or even if they take it apart and gain insightful information of its functionality, they will not know how to knead dough by hand as the master baker did it. That tacit piece of knowledge has remained within its knowers, the master and the apprentice. During the machine's engineering and design phase, the tacit skill of dough kneading has not been made explicit, but rather transformed and reshaped into something different.

Perhaps the most cited example of tacit knowledge is bicycle riding. Although most people know how to do it, no one can put it into words. The only way to learn it is to practice it. Getting help from other people merely limits the number of scratches and bruises rather than speeding up the learning process. In a most impressive feat of mathematical skills, scientists have figured

out the formula behind bicycle riding. As the equation consists of nine pairs of brackets and 31 numbers and symbols, here is the simplified version of it: "inertia forces + gyroscopic forces + the effects of gravity and centrifugal forces = the leaning of the body and the torque applied to the handlebars of a bike" (Phys News, 2010). However, people have ridden bicycles without having the faintest idea about this formula, and will undoubtedly continue to do so. Furthermore, knowing the formula does not make a person a better rider. Whether it is motoric skills, like bicycle riding or swimming, auditory skills, like a musician hearing the faintest flaw in a guitar's tuning, tacit knowledge cannot be put into words.

When it comes to the definition of a **multinational corporation**, this paper will adhere to the one offered by Ghoshal et al., who construe it as "a group of geographically dispersed and goal-disparate organizations that include its head-quarters and the different national subsidiaries" (Ghoshal & Bartlett, 1990, p. 603). This interpretation contains important factors contributing to gaps in perception, namely 'geographical dispersion' and 'goal disparity', as it will be detailed further in this paper.

Regarding **perception gaps**, giving a clear definition is no easy task, as this paper will use it in very broad manner. An overly-simplistic way of defining it would be that a perception gap occurs when a message is misunderstood by its receiver. This interpretation points towards communication, either oral or written, but this paper will use the notion referring to much more than that. By no means excluding verbal communication, this thesis will focus on actions rather than words. Anything happening within an organisation can be perceived differently by different people. Every action undertaken sends some sort of message, which can be interpreted in many ways by the people affected by it, and even the ones who merely hear about it. Even the lack of

action can have multiple interpretations. Each person has a different set of lenses through which they perceive their surrounding environment, such as language, culture, education, religion, mood etc. These differences in perception sit at the foundation of this thesis, and they will be detailed further in the next chapter, Methodology.

2. Methodology

This section of the paper will outline the methodological process of this thesis. Firstly, it will describe the pre-existing assumptions and interests related to Knowledge Management, both as a field of study as well as an organisational practice. Secondly, it will chalk out the philosophical stance, together with its impact on the theory being advanced, and thirdly, it will describe delimitations.

In his previous professions, the author has encountered various degrees of perception gaps between management and employees, spread to tens of firms across three different countries. In electronic appliances sales, the company would increase the sales target if it was met more than three times in six months, continuously raising it until it reached unreasonable values. While working with the maintenance staff in a food production plant, the salary plan followed a most peculiar pattern. The company paid a 'cooperativa', which is the Italian equivalent to a Danish 'vikar', which in turn paid a worker's agency, which in turn paid the workers. This was rather costly for the company, but it gave them the legal frame to fire people on the spot and send them home immediately. All this wasteful salary policy took place while the factory was mainly running on technology from the 1950s, as it was the day when it was inherited by the current owner from his father. At another food production facility, the workers were tasked with holding a six-pack of bottles against a neon light, in order to check if the bottles of fruit tea contained any mould. This constituted the only quality control, after which the products were shipped to the stores. All this work was done in cramped, non-ventilated spaces, and the neon lights gave away a lot of heat. The salary followed the same pattern as previously described. The list of examples is quite extensive, as working through a 'cooperativa' gave the opportunity to work for a large variety of

companies. In all these various establishments, the workers, including the author, felt like the company was cutting corners on employees' working conditions for the sake of a few extra pennies in profits. All these conditions were right at the border of illegal, and the previously described form of employment made it very easy to pass the responsibility to someone else. Now let us imagine that one of these companies would ask their employees to share their knowledge 'for the good of the organisation'. We can safely assume that the chances of success of a KM initiative in these settings are non-existent. Furthermore, one of the managers stated that the workers should be grateful for the opportunity they were given, namely working for one of the biggest food companies in Italy, showing an enormous gap in perceptions.

As the author was not familiar with the concept of KM at that point, no experience in that field was gathered, only frustrations. Perception gaps continued to be encountered during academical studies. They appeared as underlying issues during two semester projects, even though the topic of those researches concerned Communities of Practice and respectively Internal Communication. The second semester project was when Knowledge Management was looked into thoroughly, in connection with Internal Communication. It was during this research that the author began connecting the dots, acknowledging the importance of perception gaps from an academical point of view and linking it to past experiences. If it were to pinpoint one academical article that stands at the root of this paper, it would be the one in which Lucier et al. put the spotlight on the low chances of success for KM initiatives (Lucier & Torsilieri, 1997). It was at this point that the proverbial coin dropped and the correlation between these difficulties and the gaps in perceptions was intuited.

The literature review on KM started during the eighth semester project and was taken further for the purposes of this thesis. During these two phases, a few key elements were remarked. During the first part, it was noticed that the corpus of literature on KM follows the general direction set by the forefathers of the concept, Nonaka, Davenport, and Polanyi. Most subsequent articles have their roots from these works, and the divergencies from the path are more form than essence. It was also during this part that another insight was gained, namely that there is ample discussion and analysis on KM, all the while largely ignoring how difficult is to implement it.

During the second, more in-depth literature review, the previous observations were discerned again, and furthermore, it was noted that the literature on the difficulties in implementing KM was poorly developed, with the remark that it is slowly gaining ground. The existing body of literature on these barriers was found to have a common theme, designating the main obstacles to be human related issues, most common ones being culture, trust, or motivation. Technological issues were either completely ignored or mentioned only passingly. Since perception is an important factor behind the human related issues, the correlation was identified. On the next page there is a visual representation of how this process took place.

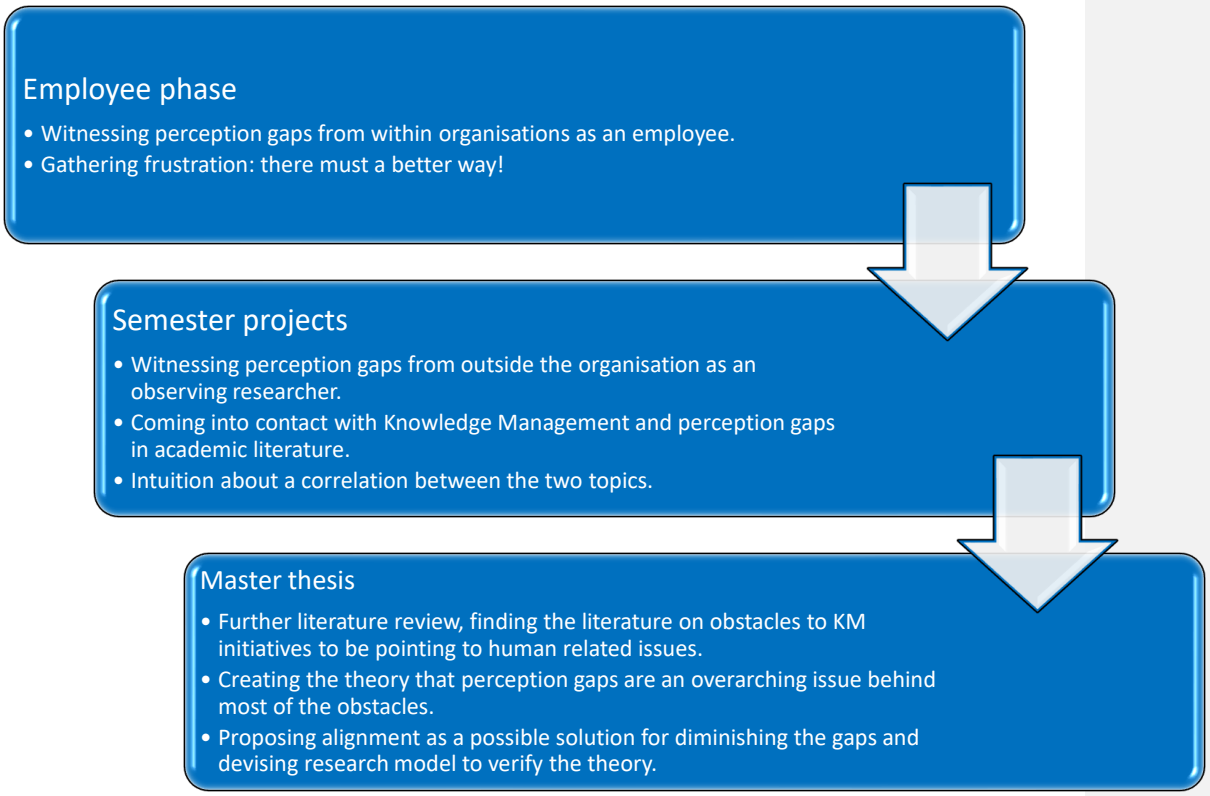

Figure 1. Visual representation of the subject's evolution. Image source: own creation.

The philosophical stance of this paper was dictated by its core concept, namely perception gaps. The purpose of this thesis is to look into their correlation to the chances of success for KM initiatives. Thus, it makes sense to employ social constructivism as the philosophical assumption of this paper. When analysing a social phenomenon, a social constructivist does not view it as existing independently, but as being "constructed", generated and maintained by means of collective human action and social practices (Collin, 2013, p. 894). This philosophical stance constitutes more than underlying assumption, as it can be viewed as a backbone to the entire thesis. Indeed, using another stance would change the paper's design completely. Employing an objectivist stance would negate the very concept of 'gaps' in perception. From that stance, the perceptions cannot differ while still being valid. An objectivist would seek to find which perception is true and dismiss the others as not true. No alignment would be required, since there is no more divergence in perceptions. At this point, an assessment of the organisation can be made, and any obstacles in the path of KM implementation removed.

However, since the in-depth literature review pointed out human related issues to be the main obstacles for KM initiatives, it was imperious to use social constructivism, since it made it possible to analyse these issues in their respective social context. As an important note here, 'perception gaps' is a theoretical concept, a construct created by academics in order to define and understand a real-life phenomenon. In its turn, this philosophical stance influenced the thesis by dictating how the divergencies in perception were regarded. Using social constructivism made it possible to consider multiple perceptions as being valid constructions of reality, without seeking to measure their validity, but their impact on human behaviour. People

will act according to their perception, their constructed reality, regardless of what set of facts or premises they are based.

It would be an over-simplification to put an equal sign between social constructivism and the notion of perception gaps, but they share similar aspects. The idea of analysing different perceptions without seeking to find if they are real or false, only their implication, is akin to the core concept of constructivism of regarding a phenomenon as constructed by the humans involved, not as existing independently of them. Regarding KM implementation, the people involved will construct their reality of it or what is asked of them. Without trying to assess what causes this disparity in perceptions, this paper will look at their consequences.

A good example is culture, one of the notions most commonly pointed out as a barrier to KM initiatives in the literature. Under social constructivism, culture is regarded as "an emergent reality in a continuous state of construction and reconstruction", and not a reality external to people (Bryman, 2016, p. 30). The same author warns about taking this notion to extreme, and considers that culture is not "an inert objective reality that possess only a sense of constraint: it acts as a point of reference but is always in the process of being formed" (Bryman, 2016, p. 30). This way of understanding culture, namely that it influences people while simultaneously being continuously constructed by them is the perfect setting in which to work with divergent perceptions while considering them all to be valid representations of reality.

While not adhering to the textbook definition of inductive research, this paper does follow its pattern. Indeed, the goal of this papers is to develop a new theory based on observations. This fits with Bryman's definition of induction (Bryman, 2016, p. 23). To be closer to the classic archetype of induction, there should be one more step, empirically testing the newly developed

theory. This was not done because the time and resources necessary for this kind of research are way beyond the possibilities of a university student. As another divergence from the archetype, the largest portion of observations was done entirely empirical, as the author was unfamiliar with social studies at that time, but they stand as a valid departure point to the theory nonetheless. In fact, it can be argued that a unique point of view on the matter at hand was acquired this way. If a social researcher would undergo the same experiences, they would not be able to separate the academic from the employee, at least not entirely. Furthermore, there are ethical considerations to be take into account if a researcher were to get hired in a company without disclosing his intentions. Doing these observations before becoming a social researcher gave the unparalleled chance to be the proverbial 'fly on the wall'. Being a simple employee completely removed the possibility of people behaving differently, knowing that they are being observed. After all, the theory concerns gaps in perception between employees, not social researchers.

There are, of course, delimitations to this theory. One of the most obvious one would be the highly personal aspect of it, with the author being directly involved, observing perception gaps while working for various companies. Such gaps continue to be observed at the author's current job, thus sustaining a certain degree of personal frustration. As it turns out, this paper is affected by human related issues, just as KM seems to be. This could cause bias in assessments and pointing out solutions.

Speaking of solutions, one of the obstacles to KM initiatives, scilicet the language barrier, would be largely untouched by achieving alignment. Some minor, indirect improvements may be achieved through improving trust across the organisation. For example, people getting worried that they are being made fun of when other people speak another language and start laughing;

a person does not ask for clarification when someone tells them something in a language they do not comprehend adequately for fear of losing face. Such problems may be attenuated through improved levels of trust. This is purely speculative, and a thorough verification should be included in the research design.

The cultural barrier also remains a pending issue, and the same observations apply as described in the previous paragraph. However, the language and cultural barriers are two of the most challenging aspects of working in an international setting, and their solutions are very expensive, very time consuming, or a combination of both. Having translators on site, available at all times would slow down communication, and become very expensive very fast. Implementing language courses is very time consuming, not particularly cheap either, and requires employees to use their spare time to attend. For the lack of better solutions, the language and culture barriers remain in play, and managers have to keep in mind that they exist, and work around them.

Another delimitation is that observations were done empirically, without theoretical background. This means that, while the employees' perceptions were gauged as genuinely as possible, management's perceptions were never measured. There was, however, a very limited period in which the author experienced perception gaps first-handed after having been acquainted with the academical notions of Knowledge Management and perception gaps. This period did not change the author's perspective on the matter, and in fact has consolidated it to a small extent.

Researcher bias is another factor to be taken into consideration. Since observations, literature review, and theory development were done by one person, there is the possibility that

another researcher would reach a different conclusion when looking at the same problem. Since this paper's core concept revolves around perceptions it does not claim high reliability. One core concept of this paper is that every person constructs their own reality according to a unique set of perceptions. The author is no exception to this notion, having his own set of lenses through which he perceives reality.

3. Literature review.

This chapter will review the literature existing so far on KM. It will contain a short description of the origins of Knowledge Management, both as a concept and as a field of study. The next section will do an in-depth review on three of the most influential works written on the subject, *Working Knowledge*, *The tacit dimension*, and *The Knowledge-Creating Company*. Since the last entry is widely regarded as a cornerstone to KM, it was deemed necessary to include a few articles criticising it. The following section will be comprised of reviews of some of the most often cited articles in the field, along with a few more which were found by the author to be relevant or have unique approaches. The ensuing two sections will list articles regarding perception gaps and barriers to KM initiatives, respectively. The last portion will underline a common theme that was found across most of the literature and offer a short conclusion.

The ancient traditions of the guilds of crafters, where apprentices acquired their competencies from a master through direct observation can arguably be defined as a form of knowledge management. Davenport and Prusak think that before KM was defined as a field of study, there were casual and unconscious nuclei of Knowledge Management being used by managers (Davenport & Prusak, 1998, p. 9). However, the concept of KM as it is known today was developed in the late 1980s and early 1990s (Koenig & Neveroski, 2008) (Khasseh & Mokhtarpour, 2016). Literature looking into the connection between knowledge, innovation, and business can be found as early as 1934 in Schumpeter's book 'The Theory of economic development' (Khasseh & Mokhtarpour, 2016). According to the same authors, the publication of this work represents "an important milestone in the history of KM issues and entrepreneurship

as well" (Khasseh & Mokhtarpour, 2016). This is in spite of the fact that the book focuses heavily on the link between innovation and business, and not on knowledge or its management per se.

One major development in the field was Polanyi's work in the 1950s and 1960s, which despite not working directly with the concept of KM, has set up one of its most important notions, namely the distinction between tacit and explicit knowledge (Khasseh & Mokhtarpour, 2016, p. 1399). Polanyi's statement that "we know more than we can tell" remains a credo of tacit knowledge to this day (Polanyi, 1983, p. 4). Going deep into the tacit aspect of knowledge, Polanyi also states that attempting to formalise "all knowledge to the exclusion of any tacit knowledge is self-defeating" (Polanyi, 1983, p. 20).

Another milestone in the academic field of KM was set by Davenport and Prusak in 1998. In the authors' opinion, "the management community has come to realize that what an organization and its employees know is at the heart of how an organization functions" (Davenport & Prusak, 1998, p. 10). As the authors themselves put it, "the core message of [the] book is that the only sustainable advantage a firm has comes from what it collectively knows" (Davenport & Prusak, 1998, p. 15). Their book draws clear delimitations between data, information, and knowledge (Davenport & Prusak, 1998, pp. 2-6). While the first two have straightforward definitions, the latter receives quite an extended one, as follows:

> Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents

> or repositories but also in organizational routines, processes, practices, and norms (Davenport & Prusak, 1998, p. 5).

Since data is described as "a set of discrete, objective facts about events" (p. 2), and information as "data that makes a difference" (p. 3), the three concepts are seen as belonging in a hierarchy of complexity: "knowledge derives from information as information derives from data" (Davenport & Prusak, 1998, p. 6). While acknowledging the intricacy of this definition, the authors also state that complexity is an inherent characteristic of knowledge, and it is vital for tackling complex problems (Davenport & Prusak, 1998, p. 9). Included in the lengthy definition of knowledge is also the importance of the human factor, consistent with Prusak's previous work in collaboration with Mahey, in which they state that "knowledge does not exist independently of a knower" (Fahey & Prusak, 1998, as found in Alavi & Leidner, 1999, p. 9). Furthermore, information technology should be seen as a mere tool for storage and transportation of knowledge, and not as creators of knowledge, nor even as promoter of its generation or sharing (Davenport & Prusak, 1998, p. 18).

One important aspect touched by the book is the problematic task of quantifying the merit of a knowledge worker's activity, as firms are unable to "express it in traditional accounting or financial terms" (Davenport & Prusak, 1998, p. 30). This makes their position a prime target for cost cutting, although the authors strongly advise against it (Davenport & Prusak, 1998, p. 30). If the circulation of knowledge within an organisation can be seen as a market with sellers and buyers, then the knowledge worker plays the essential role of the broker, helping the vendor and the customer find each other. While cautioning against a "technology-centered knowledge management approach", Davenport and Prusak acknowledge that some technological

infrastructure is necessary (Davenport & Prusak, 1998, p. 166). Without favouring a certain system over another, the authors do suggest that a good starting point would be to use existing initiatives and programs as a launchpad for knowledge management (Davenport & Prusak, 1998, p. 165).

One interesting notion coined by Prusak is *ground truth*, although the term is borrowed from the U.S. Army (Davenport & Prusak, 1998, p. 8). The original, military meaning refers to examining "what was supposed to happen in a mission or action, what actually happened, why there was a difference between the two, and what can be learned from the disparities" (Davenport & Prusak, 1998, p. 8). When conveyed to knowledge, the author uses it as a feature. "Knowledge has 'ground truth', [which includes] the rich truths of real situations experienced close up: on the ground, rather than from the heights of theory or generalization" (Davenport & Prusak, 1998, p. 8).

One of the most influential books concerning Knowledge Management is, without a doubt, Nonaka and Takeuchi's work of 1995, 'The Knowledge-Creating Company' (Glisby & Holden, 2003, p. 29). The book has achieved "paradigmatic status" (Gourlay, 2006, p. 1415), and the model it proposes has been described as "one of the best known and most influential […] in knowledge strategy literature (Choo & Bontis, 2002, p. 9, as found in Gourlay, 2006, p. 1415).

Nonaka et al.'s book regards knowledge as "the basic unit of analysis for explaining firm behaviour" (Nonaka & Takeuchi, 1995, p. viii). Their work is based on two underlying concepts, as follows. One is the belief that the organisation is a knowledge creating entity, and not just a processor of it (Nonaka & Takeuchi, 1995, p. viii). According to the authors, "knowledge creation has been the most important source of [the Japanese firms'] international competitiveness"

(Nonaka & Takeuchi, 1995, p. viii). The second major concept of the book is the dichotomy between tacit and explicit knowledge, akin to Polanyi's work (Nonaka & Takeuchi, 1995, p. viii, p. 59; Polanyi, 1983). In their opinion, the first one is the most important of the two, whilst remaining an enigma for the "Western philosophical tradition", which has focused too much on the second (Nonaka & Takeuchi, 1995, pp. viii-ix). The authors state that the dyadic components of knowledge and their interaction are the "key dynamics of knowledge creation in the business organization" (p. ix), and the epistemological cornerstone of the new theory on knowledge creation (Nonaka & Takeuchi, 1995, p. 56). As a caveat to their distinction of the two notions, tacit and explicit knowledge are also seen as mutually complementary entities, and not totally separate (Nonaka & Takeuchi, 1995, p. 61).

One of the declared goals of this book is to "formalize a generic model of organizational knowledge creation" (p. ix) by using Japanese companies for the study, since their organisational success is owed largely to "their skills and expertise at 'organizational knowledge creation'." (Nonaka & Takeuchi, 1995, p. 3). One of the claimed advantages of Japanese companies over their Western counterparts is their ability to absorb knowledge from the outside, assimilate it within the organisation, and return it to the outside in the form on innovation (Nonaka & Takeuchi, 1995, p. 6). Another goal, admittedly ambitious, is to develop a "universal model of how a company should be managed, based on the converging of management practices found in Japan and the West" (Nonaka & Takeuchi, 1995, p. 16).

The authors list three characteristics of knowledge creation that relate to the transformation of tacit knowledge to explicit, as follows. Firstly, figurative language, symbolism, metaphors, and analogies can be used to express intuitions and insights (Nonaka & Takeuchi,

1995, pp. 12-13). Such communication devices allow people to “put together what they know in new ways and begin to express what they know but cannot yet say” (Nonaka & Takeuchi, 1995, p. 13). Secondly, “new knowledge always starts with an individual”, and at later stages is “amplified or crystallized” at the group level (Nonaka & Takeuchi, 1995, p. 13). Thirdly, “new knowledge is born out of chaos” (p. 14), and “in the midst of ambiguity and redundancy” (Nonaka & Takeuchi, 1995, p. 12).

When it comes to assigning responsibilities for knowledge creation, Nonaka and Takeuchi claim that they should be spread organisation-wide, albeit with different roles played by employees, middle managers, and senior managers (Nonaka & Takeuchi, 1995, p. 15). Furthermore, “the creation of new knowledge is the product of a dynamic interaction among them” (Nonaka & Takeuchi, 1995, p. 15). One very interesting point can be found within this section of the book, namely that the reality and vision of the top managers does not necessarily align with those of the employees, and the job of bridging that gap falls in the lap of middle managers (Nonaka & Takeuchi, 1995, p. 15). It is they who “mediate between the ‘what should be’ mindset of the top and the ‘what is’ mindset of the front-line employees” (Nonaka & Takeuchi, 1995, p. 15). Furthermore, the authors advance a model of organisational management in which middle managers are “at the very center of knowledge management, [positioned] at the intersection of the vertical and horizontal flows of information within the company” (Nonaka & Takeuchi, 1995, p. 127).

When it comes to defining knowledge, Nonaka and Takeuchi adhere to the notion that it is different from information, but not necessarily in a hierarchic way, but rather complementary (Nonaka & Takeuchi, 1995, p. 58). “Information is a flow of messages, while knowledge is created

by that very flow of information, anchored in the beliefs and commitment of its holder" (p. 58), [and] "knowledge is *essentially related to human action*" (Nonaka & Takeuchi, 1995, p. 59). Finally, although claiming that there is a clear separation between information and knowledge, the authors also state that both are "context-specific and relational in that they depend on the situation and are created dynamically in social interaction among people" (Nonaka & Takeuchi, 1995, p. 59).

Arguably the most important assessment of this book is the four models of knowledge conversion, as follows. "From tacit knowledge to tacit knowledge, which we call socialization; from tacit knowledge to explicit knowledge, or externalization; from explicit knowledge to explicit knowledge, or combination; and from explicit knowledge to tacit knowledge, or internalization" (Nonaka & Takeuchi, 1995, p. 62).

These conversions of knowledge interact in a spiral model, conditioned by a number of triggers within the organisation (Nonaka & Takeuchi, 1995, p. 70). The way they are interlinked is described by the authors through a diagram, reproduced below.

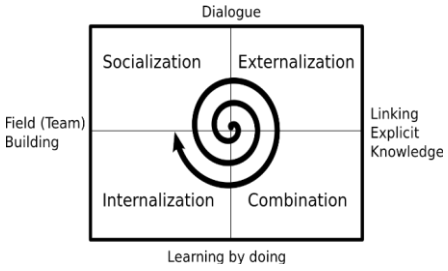

Figure 2. The knowledge spiral. Image source: (Nonaka & Takeuchi, The Knowledge-Creating Company, 1995).

Critics are never late to follow fame, and *The knowledge-creating company* is no exception. Gourlay (2006) holds no bars and points out several flaws in the theory. In his opinion, the four-way knowledge conversion model is faulty, as only three conversion patterns are plausible, and none of them are "supported by evidence that cannot be explained more simply" (Gourlay, 2006, p. 1415). He goes further by saying that the framework ignores inherently tacit knowledge, and that the definition of knowledge is "radically subjective" (Gourlay, 2006, p. 1415). Besides arguing that explicit knowledge to explicit knowledge would constitute a knowledge transfer, and not knowledge creation, Gourlay brings heavier imputations, such as misinterpretations of research findings, and choosing non-representative accounts of Western philosophy (Gourlay, 2006; Jorna, 1998, as found in Gourlay, 2006).

Another hole in the theory of knowledge-creating companies claims to be found by Glisby et al., and it regards its contextual constraints (Glisby & Holden, 2003). According to the authors, Nonaka and Takeuchi fall prey to their "very own critique of the Western approach to objectifying knowledge and focuses overly on explicit manifestations" (Glisby & Holden, 2003, p. 30). While not contesting the theory's validity, the authors dispute its functionality outside the Japanese context: "Given its Japan-specific nature, therefore, Nonaka's model cannot uncritically be transferred to a non-Japanese context and have the equivalent explanatory power (Glisby & Holden, 2003, p. 35).

Polanyi, Davenport et al., and Nonaka et al. have set a steadfast road for subsequent Knowledge Management theory. The clear majority of ensuing approaches follow in their footsteps and have at least one of them at their roots. This next portion of the literature review

will take a short look at some of the most often cited works on Knowledge Management, according to Khasseh and Mokhtarpour (2016).

Grant proposes a "knowledge-based theory of the firm", in which "knowledge is viewed as residing within the individual, and the primary role of the organization is knowledge application rather than knowledge creation" (Grant, 1996, p. 109). The main arguments of the paper are that knowledge is a vital asset for any organisation, (which one of the opening lines of Nonaka et al.'s work), and that it resides within the individual, which is in alignment with Davenport's paper. While it cannot be seen as a mere continuation of those works, Grant's work arguably draws from them and proposes ramifications of their theories. One point raised by the author is that "the theoretical foundations of the shareholder value approach are challenged" if we consider the next chain of thought: knowledge is the primary resource of the firm, knowledge is owned by employees, most of this knowledge can only be exercised by the people who have it (Grant, 1996, p. 120). This would require a shift in organisational structure, calling for de-centralisation of power, at least in some areas.

Alavi et al. do an in-depth analysis of knowledge management, organisational knowledge, and their different taxonomies (Alavi & Leidner, 1999). KM is seen as consisting of "distinct, but interdependent processes", whose inherent complexity make it impossible to devise a "single or optimum approach to organizational knowledge management and knowledge management systems" (Alavi & Leidner, 1999, p. 69). The dyadic pair of tacit and explicit knowledge are ever present, as is the concept of knowledge residing within individuals. The authors regard knowledge as being a vital resource for any organisation, able to bring sustainable competitive advantage, unlike tangible resources (Alavi & Leidner, 2001, p. 3). The advantage of knowledge-

based resources lies in their inimitability, as they are “often subtle or difficult to understand or copy by outside observers” (Alavi & Leidner, 2001, p. 4).

There are also divergences from the beaten path, such as considering that knowledge can also be intrinsic to groups, documents, processes etc., not just individuals, acknowledging the role of IT systems for KM. etc. (Alavi & Leidner, 1999, p. 69). The authors also raise numerous research questions and future directions of research, of which a few will be enumerated as follows. If tacit knowledge is “imperfectly imitable”, how could it be successfully reapplied by people from disparate locations within the organisation? (Alavi & Leidner, 2001, p. 53). What is the importance of tacit knowledge to Knowledge Management? (Alavi & Leidner, 2001, p. 54). The list is quite extensive, and raises some excellent questions for future consideration and research.

The focus on the human aspect of knowledge can be seen in a multitude of papers on KM. For instance, Minbaeva et al. dig deep into how Human Resources Management practices can enhance knowledge transfer, while adding Cohen and Levinthal’s concept of ‘absorptive capacity’ (Minbaeva, Pedersen, Bjorkman, Fey, & Park, 2003). The authors argue that “the absorptive capacity of the receiving unit is the most significant determinant of internal knowledge transfer in MNCs” (Gupta & Govindarajan, 2000, as found in Minbaeva, Pedersen, Bjorkman, Fey, & Park, 2003, p. 586). This paper considers employees’ ability and motivation as key factors for absorptive capacity and analyses which organisational mechanisms can increase it (Minbaeva, Pedersen, Bjorkman, Fey, & Park, 2003). One interesting claim in this article is that “expatriates are used in MNCs as vehicles for knowledge transfer from other MNC units to the focal subsidiary,

where the higher number of expatriates in a subsidiary, the more knowledge may be transferred" (Downes & Thomas, 2000; Bonache & Brewster, 2001, as found in Minbaeva et al., 2003, p. 593).

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In their paper of 2001, Carter et al. argue that the main focus of KM should be shifted from the IT systems involved, and instead concentrate on the "human factors associated with the transfer, storage and exploitation of knowledge" (Carter & Scarbrough, 2001, pp. 215-216). The authors discern three components of KM, namely technical, social, and economical (Carter & Scarbrough, 2001, p. 216). The technical component regards centralising knowledge scattered across the organisation and codifying tacit knowledge, thus making it easily available for everyone (Carter & Scarbrough, 2001, p. 216). The social component involves "collectivizing knowledge so that it is no longer the exclusive property of individuals or groups" (Carter & Scarbrough, 2001, p. 216). Lastly, the economical component regards KM as "a response to organizations' need to intensify their creation and exploitation of knowledge" (Carter & Scarbrough, 2001, p. 216). Since their theory concentrates its limelight on the people involved in the process, the "second generation of KM" they put forth relies heavily on Human Resources policies (Carter & Scarbrough, 2001). The authors differentiate between five separate positions within the discourse of Human Resources management, as follows: the best practice approach, the knowledge worker approach, the congruence approach, the human and social capital perspective, and the learning perspective (Carter & Scarbrough, 2001, pp. 217-220). As conclusion, the authors argue for integration of Knowledge Management with Human Resource management polices (Carter & Scarbrough, 2001, p. 221).

Garavelli et al.'s work intertwines Knowledge Management with psychology and regards knowledge transfer as an "interaction between two (or more) cognitive systems" (Garavelli,

Gorgoglione, & Scozzi, 2001, p. 278). Acknowledging the uniqueness of every KM initiative, the authors suggest that context-driven approaches must be employed, regarding both which IT systems are best suited, as well as what managerial practices would yield the best results; this approach intertwines Davenport's view of the importance of the human factor with the importance of IT systems. The authors allocate an entire chapter to the analysis of Internet related technologies, such as hypertexts, portals, cookies etc. and their impact on KM, motivating their choice by the wide role assigned by the literature to the online medium (Garavelli, Gorgoglione, & Scozzi, 2001, p. 275).

Zheng et al.'s work argues for an interdependency between KM and organisational culture, structure, and strategy, claiming that both sides can benefit from the other (Zheng, Yang, & McLean, 2010). The authors argue for "examining knowledge management as a mediating mechanism between general organizational context and organizational effectiveness", and reprimand existing literature for starting "from a micro perspective and investigate the immediate knowledge-related environment" (Zheng, Yang, & McLean, 2010, p. 764).Other denunciations to the literature is that organisational level strategy has been left out, or insufficiently covered (p. 764), and that there has not been established a firm connection between KM and organisational level performance (Zheng, Yang, & McLean, 2010, p. 765). This article's conclusion states that "knowledge management, organization culture, structure, and strategy are all significantly related to organizational effectiveness" (Zheng, Yang, & McLean, 2010, p. 768).

In Disterer's proceedings from an international conference he states that "people issues are meant to be critical for the success of knowledge management and knowledge transfer

initiatives" (Disterer, 2001, p. 2). The same author offers this next quote: "if the people issues do not arise, the effort underway is probably not knowledge management. If technology solves the problem, yours was not a knowledge problem" (Ruggles, 1998, p. 88, as found in Disterer, 2001, p. 1). One unique aspect pointed out in this paper is mentioning the design of the physical locations. The author argues for modern, open-space offices and shops in order to lower bureaucracy and formal communication, thus fostering "ad hoc, informal and face-to-face communication" (Disterer, 2001, p. 6).

McInerney's article showcases a connection between knowledge management and the dynamic nature of knowledge (McInerney, 2002). The author adheres to the notion of knowledge being tightly linked with the knower, but claims that it is also in a continuous state of flux: "knowledge has both an active and a social dimension" (Brown & Duiguid, 2000, as found in McInerney, 2002, p. 1010). Besides bringing some critique to the existing literature, this article also claims that understading the dynamic nature of knowledge constitutes a basis for effective KM in many disciplinary contexts.

One article advances an allegedly uncommon approach, namely pointing out a connection between ethical climates and KM (Luo & Lee, 2013, p. 463). While claiming that there are few other studies on this topic, this paper also discusses factors such as trust, commitment and satisfaction (Luo & Lee, 2013). Their research on Taiwanese companies confirmed the positive relationship between those three factors and KM performance (Luo & Lee, 2013, p. 471).

One of the most exceptional approaches to KM is to tie it to social media. "Knowledge management and social media seem to be made for each other because social media platforms support sharing, co-creation and discussion, which are key knowledge processes (von Krogh,

2012, as found in Helms, Cranefield, & Van Reijsen, 2017, p. 1). The authors acknowledge that organisations' interest in KM has dwindled, but claim that social media can re-energise it (Helms, Cranefield, & Van Reijsen, 2017, p. 3). One strenght of this approach is that it relies on technologies and software that are already familiar, thus reducing resistance to change (Helms, Cranefield, & Van Reijsen, 2017). Another aspect social media that encourages KM is its informality, which, according to the authors, "enables unofficial, unstructured, intimate, and brief conversations between members" (Sedighi et al., 2017, as found in Helms, Cranefield, & Van Reijsen, 2017, p. 49).

When it comes to perception gaps, the literature appears to be quite lacking, with but a few exceptions. Birkinshaw et al.'s work coined the term *perception gap*, but their paper analyses their impact on headquarters-subsidiaries relationships, specifically power struggles (Birkinshaw, Holm, Thilenius, & Arvidsson, 2000). This article focuses on perception gaps between headquarters and subsidiaries, specifically what is the latter's role in an MNC (Birkinshaw, Holm, Thilenius, & Arvidsson, 2000). The core concept of this article is that subsidiaries often overestimate their role in the organisation, leading to tense relationships with the headquarters (Birkinshaw, Holm, Thilenius, & Arvidsson, 2000). The authors do claim that one "would expect to see significant differences in opinions between HQ and subsidiary managers on just about everything" (Birkinshaw, Holm, Thilenius, & Arvidsson, 2000, p. 322). They state that these gaps in perception are impossible to entirely erase, but their complete removal would also impede innovation (Birkinshaw, Holm, Thilenius, & Arvidsson, 2000).

Along the same path goes Chini et al.'s work, taking the analysis further by looking at perception gaps in different contexts within the company, but still from a managerial point of

view (Chini, Ambos, & Wehle, 2005). This article also focuses on perception gaps between headquarters and subsidiaries, together with their impact on the organisation's strategic environment (Chini, Ambos, & Wehle, 2005). Ciabuschi at al. also work with differences in perception, specifically between headquarters and subsidiaries, but their paper focuses solely on their impact on innovation (Ciabuschi, Forsgren, & Martin, 2011). The authors make a comparison between two perspectives, one claiming that headquarters makes rational choices about its involvement in the innovation process being carried out in the subsidiaries, and the other perspective regarding this involvement to be less rational (Ciabuschi, Forsgren, & Martin, 2011). This second perspective, referred to in the article as the "sheer ignorance perspective", assumes that "HQ tends to intervene in subsidiary innovation processes *despite* its lack of knowledge, rather than *because of* its possession of relevant knowledge" (Ciabuschi, Forsgren, & Martin, 2011, p. 959). As previously mentioned in their respective paragraphs, Nonaka et al.'s and Davenport et al.'s works mention perception disparities only passingly (Nonaka & Takeuchi, 1995, p. 15; Davenport & Prusak, 1998, p. 8).

Regarding the barriers to knowledge management, the academic literature is unaccomplished, with only a handful of articles regarding the topic. One of the most recent and comprehensive papers was written by Lin et al., who not only divide the barriers into categories, but also link them to different stages in the development of a knowledge management initiative (Lin, Wu, & Yen, 2102). Furthermore, the barriers also change and evolve along with KM development (Lin, Wu, & Yen, 2102, p. 18). Their main categories are knowledge source, knowledge receiver, contextual factors, and mechanisms (Lin, Wu, & Yen, 2102, p. 16). The stages of knowledge management development are categorised as follows: knowledge chaotic,

knowledge conscientious, knowledge management, KM advanced, and KM integration (Lin, Wu, & Yen, 2102, p. 12). Their finding list large numbers of obstacles to knowledge flows, such as low awareness, fear of losing ownership of intellectual property, unrealistic expectations, lack of coordination etc.

Singh et al. also categorize the difficulties of KM implementation, but use an interpretative structural modelling, which is an uncommon approach. Their paper puts together expert's opinions and "various literature sources" in order to pinpoint nine barriers to KM implementation (Singh & Kant, 2008, p. 142). Here is the complete list, in no particular order: lack of top management commitment, lack of technological infrastructure, lack of methodology, lack of organisational structure, lack of organisational culture, lack of motivation and reward, staff retirement, lack of ownership of problem, and staff defection (Singh & Kant, 2008, p. 142, Table1). When going into detail about each barrier, the authors point out the lack of proper organisational culture to be a "key barrier for successful implementation of knowledge management in an organization" (Singh & Kant, 2008, p. 143).

Another method of categorising the obstacles is by their apparent source, as employed by Sun and Scott (2005), Disterer (2001), or Bureš (2003). The first authors differentiate between levels of learning in an organisation, namely individual, teams, organisational, and inter-organisational (Sun & Scott, 2005, pp. 76-77). Thus, they compile a lengthy list of 14 sources of barriers which branch out in an even lengthier list with tens of possible barriers (Sun & Scott, 2005, pp. 79-81). Among them there are trust, group acceptance, personality differences, fear of losing ownership, conflicting cultures, flexibility, and many, many more (Sun & Scott, 2005, pp.

79-81). While the number of identified barriers is impressive, the paper does not offer any form of solutions to any of them, merely listing and classifying the obstacles.

Disterer divides the origin of the barriers to knowledge transfer into two categories, individual and social (Disterer, 2001). The first type includes loss of power, revelation, uncertainty, and motivation (Disterer, 2001, pp. 2-3). The second category is comprised of language, conflict avoidance, bureaucracy and hierarchy, and incoherent paradigms (Disterer, 2001, p. 3). When it comes to solutions, the author offers a general list of them, without creating links to specific barriers. These fixes include notions such as rewards and incentives, communities of practice, organisational design, and trust (Disterer, 2001, pp. 4-6).

Bureš follows the same dyadic pattern, dividing the barriers into individual and social barriers, just as the previous author (Bureš, 2003, p. 57). As a divergence from that path, one of the individual barriers, namely conflict of motives is analysed separately, becoming a third category (Bureš, 2003, p. 58). In the conclusion chapter, the author claims that "some of [the barriers] are possible to remove completely but some of them will still remain" (Bureš, 2003, p. 61). Regarding solutions, Bureš again follows Disterer's example, and enumerates a few fixes. "In fighting with individual and social barriers we can use tools and techniques like narrative, expressive communication, trust, managing people, team work, balanced usage of codification and personalization approaches, design and organization of workplaces" (Bureš, 2003, p. 61).

One article was found to dive deeper into the human facet of the obstacles in implementing KM. True to Davenport's credo, Damodaran et al. denunciate "techno-centric" approaches to knowledge management initiatives as the reason behind their failure (Damodaran & Olphert, 2000, p. 405). The authors look at the issues encountered during the knowledge management

initiative by analysing the different perspectives of the people involved, stratifying them into management, information system support, and "specialist" users (Damodaran & Olphert, 2000, pp. 407-408). This paper also identifies a gap between management's "vision of the future and current reality" regarding KM's functionality (Damodaran & Olphert, 2000, pp. 411-412).

One common theme can easily be seen, namely the focus on the human aspect, whether categorised as 'social', 'individual', or 'cultural'. The overwhelming majority of these articles underline the importance of identifying and dealing with issues related to human characteristics and behaviour, such as trust, resistance to change, acknowledgement, motivation, language, conflict etc. Technological issues, while recognised, are regarded as secondary at best, and seen as considerably easier to solve than the social ones.

This literature review does not claim to be exhaustive, given the sheer size of the corpus of literature on KM, time restrictions, and availability of some of the sources. It does, however, cover the most widespread theories, and touches on the origins of Knowledge Management as a discipline. Furthermore, it goes over the studies most often quoted in the field, or which were deemed relevant by the author during previous academic work regarding knowledge and its management in organisational settings. The literature regarding the significantly high percentage of failure in successfully implementing KM initiatives was found to be quasi-absent, with lone exceptions such as Lucier et al., or Storey et al., who also list possible solutions besides drawing attention on the problem (Lucier & Torsilieri, 1997) (Storey & Barnett, 2000). The theory regarding perception gaps in an organisational context was found to be sparse, at least in conjuncture with knowledge management, as the most common link is made to power struggles.

4. Discussion.

As it can be seen from the literature review, there is ample academic coverage of what and how KM should be, how it should be seen, what direction it is heading, and so forth, while there are scarcely any academic papers discussing the low rate of success for Knowledge Management initiatives. With but a few exceptions, the academical eye seems to look the other way when it comes to acknowledging how rarely KM manages to be implemented successfully and make an actual difference at an organisational level. This paper's main goal is to address this elephant in the room situation, and hopefully come up with some solutions. If Knowledge Management can't be successfully implemented, the discussions about its future development are superfluous.

Also lacking was found to be the literature about the challenges faced when attempting to implement a KM initiative, with only a limited number of articles covering it. A brief overview of them reveals an overarching common theme, namely that the human factor is the most important when considering KM initiatives, looking into aspects such as employee and organisational culture, trust, language, motivation etc. True to Davenport's point of view, the focus is shifted to the 'knower', rather than the electronic systems involved in the process. However, as the clear majority of these articles is written after the 2000s, it does appear that this gap is slowly closing.

Some features of the academical literature were quite striking; one of them is that all the researches that included data collection in the form of interviews pointed them at top tier managers. Admittedly, they are the ones creating the strategy for implementing KM, but it is the low-level employees who will be filling up the pool of knowledge and put it to use. The theory advanced in this paper proposes taking into consideration the opinions of employees at different

hierarchic levels in the organisation. Knowledge management implementation efforts should be made throughout the firm, not just at the top level. If a strategy does not diffuse through the whole company, it will remain in "high minded conversations between senior managers and in dusty binders that few bother to read" (Labovitz & Rosansky, 1997, p. 73).

This one-sided analysis could be a contributing factor to why KM is rarely successfully implemented. The existing literature on KM gives a long list of obstacles to knowledge management initiatives. If measurements of these factors are taken only from the upper management's point of view, it may lead to inaccurate readings. The approach proposed in this paper covers this aspect by suggesting that everyone in the organisation must get on the same wavelength and share a common understanding of what is trying to be accomplished before actually trying to accomplish anything. This is one of the biggest novelties of the theory being developed, and its strongest point.

Another peculiarity of the literature is that most of the papers acknowledge the tight bond between knowledge and 'knower', or the 'human nature of knowledge', only to continue as if KM was to be implemented in a void. Humans have inherent characteristic, such as being unpredictable, driven by feelings, diverse, but most importantly for this paper, they have different perceptions of their surrounding environment. As with the topic of obstacles, literature was found to be scant, especially when in conjuncture with Knowledge Management. When the people involved have divergent perceptions of notions such as what knowledge is, what part of it is tacit and which explicit, where does information stop and knowledge begin etc. the task of implementing KM becomes nigh impossible. And the differences in perception do not stop at the philosophical notions, but appear as overarching issue, deepening most, if not all the challenges

of implementing Knowledge Management. Looking into Davenport's notion of "knowledge market", one would not be surprised to find different opinions when asking top managers and frontline employees about what defines an advantageous trade (Davenport & Prusak, 1998, p. 25). One author goes as far as saying that "people use knowledge for their own benefit and that they share it only grudgingly" (Disterer, 2001). Knowledge is power, after all.

While the academic literature about the challenges of implementing KM is underdeveloped, the empirical one is teeming with articles such as "Top Reasons Knowledge Management Programs Fail" (Ragsdale, 2014), "Top 7 reasons why KM implementations fail" (Milton, 2010), "Knowledge Management Fails: Five Truths You Can't Ignore" (Krob, 2015) etc. Although non-scientific, they do underline the adversities of implementing KM, albeit not bringing anything radically new compared to the academic literature.

It has been established so far that implementing knowledge management is a daunting task, regardless of the setting in which it ought to happen. Multi-national corporations, however, have a few intrinsic characteristics that make the challenge even greater. The following segment of this paper will enumerate them and look at their influence on KM initiatives.

The most obvious one would be geographical distances and their consequences. "The […] geographic dispersion of many [firms] make it especially difficult to locate existing knowledge and get it to where it is needed" (Davenport & Prusak, 1998, p. 17). Nowadays' trend is leading towards "larger, more dispersed and more complex organisations" (Bartholomew, 2009, p. 4). Combined with an increased requirement for labour mobility, these factors lead to knowledge being fragmented more than ever, and harder to share (Bartholomew, 2009, p. 4). Physical distances make face-to-face communication nearly impossible, or at least impractical, requiring

high investments of time and financial resources. As seen in the literature review chapter, tacit knowledge is widely regarded as nigh impossible to transfer without oral communication. Furthermore, master-apprentice type of knowledge transfer has a limit to how many people can absorb the knowledge (one master can only have so many apprentices). MNC's typically have large numbers of employees and spreading the knowledge through direct contact is not feasible. Nowadays' business environment is more dynamic and fast paced than ever, and by the time a master can share their knowledge with a few thousand employees around the globe, that knowledge may already be obsolete.

Another consequence of geographical distances is the presence of cultural and linguistic barriers. These are two main categories of issues that branch out in a plethora of challenges to effective communication and transfer of knowledge. Besides the obvious problem of speaking in different languages, these factors also lead to other social issues, such as involuntary grouping of speakers of the same idiom, thus accentuating group divides, and leading to "polarization of perspectives, perceptions and cognitions" (Feely & Harzing, 2002, p. 9); insufficient language skills lead to misunderstandings, which can lead to incomplete or incorrect knowledge being transferred, apparent lack of respect etc. This list is far too long to cover in its entirety, and there is extended coverage within its own academical field. As with knowledge management itself, technology can only get so far; although communication systems have evolved tremendously, becoming faster and more secure, they still founder when the language barrier is an issue (Feely & Harzing, 2002, p. 4). Even something as simple as time zone differences are a thorn in the side of effective communication, limiting the time schedule available for conversations.

Another issue affecting KM initiatives is the 'us versus them' mentality, which is by no means limited to MNCs, but it has a stronger effect on them. The desire to belong to a group is an inherent characteristic of human beings, thus making it extremely hard to counter. Going into details on this topic, however, would be more fitting in a Psychology article. Perdue at al. have done an in-depth analysis of group bias (1990). For the interests of this paper, it is important to acknowledge that "human beings relate to people who are like themselves and tend to reject people who are different from them" (Labovitz & Rosansky, 1997, p. 8). An intrinsic characteristic of MNCs is that they create differences between people through specialisation and expertise: "management versus labor, international versus domestic, accounting versus sales" etc. (Labovitz & Rosansky, 1997, p. 8). This sort of grouping, while natural, tends to be accentuated in an MNC, and it can only hamper communication and knowledge circulation, especially when trust issues are considered.

Last but not least, the large number of employees can also cause disruptions for knowledge management initiatives. According to Davenport et al., "the maximum size of an organization in which people know one another well enough to have a reliable grasp of collective organizational knowledge is two hundred to three hundred people" (Davenport & Prusak, 1998, pp. 17-18). Typically, MNCs have easily over that number of employees, many of them in the thousands. Now, considering that each person has a different perception of their surrounding world, according to nationality, education, language(s) spoken, religious beliefs, personality traits etc., this will lead to innumerable opinions on KM and all of its facets.

Future perspectives are not looking bright, as KM might face yet another challenge, namely 'job-hopping'. "The bond of loyalty between an organization and its people has been

weakened" (Labovitz & Rosansky, 1997, p. 9). Almost 40% of millennials do not see themselves working the same job for nine or more years (PricewaterhouseCoopers, 2013, p. 9). When employees are constantly coming and going, it gets significantly more difficult and expensive to implement long-term plans, like knowledge management. After a while there might be need for re-training, as insufficient people trained in using KM are left in the company, thus ramping up even more the costs for knowledge management implementation and usage. Time will tell how KM will deal with the generation switch.

In conclusion, this paper has so far done an extensive literature review on KM, during which gaps in the theory have been identified, namely insufficient coverage on the obstacles to knowledge management implementation, and nearly non-existent coverage on the low chances of success of KM initiatives. After that it factored in the author's experiences as an employee, namely observing perception gaps between upper management and the rest of the people in the company. Thus, a new theory was developed about possible correlations between these notions: perception gaps have a negative impact on KM initiatives. These gaps can affect the implementation attempt directly, by having it misinterpreted and/or misunderstood by the employees, but they can also have indirect influence through the factors already identified as barriers by the existing literature.

5. Conclusion and solution.

So far, this paper has shown that the academic literature provides insufficient coverage of two aspects of KM, namely how difficult it is to implement knowledge management, and how rarely the initiative is successful. One reason behind the high failure rate could be the disparities in perceptions between the employees in general, but especially between upper management and low-level employees. As seen from the literature review, a large portion of the theories argue that the focus should be on the people, on their culture, on the company's culture, and not on technological means of transporting knowledge, and most definitely not on profit, at least not short-term. "It appears that the easiest way to improve knowledge sharing is to convert the corporate culture", to quote Bureš (2003, p. 57). While that seems to be agreed upon by a large portion of the theory, it does not help very much with the task, as it merely replaces the highly philosophical and abstract notion of 'knowledge', with the similarly hard to grasp notion of 'culture'. Looking into the empirical literature about barriers to KM initiatives, the lack of a common definition of knowledge and its management are pointed out as problematic, creating confusion among managers and employees alike. Switching the topic to culture would only re-start the discussion all over again. Furthermore, this paper's focus has been on misaligned perceptions, so the solution proposed by this study is to diminish the gap people's perceptions, thus modifying the culture, which should improve to odds of success for a KM initiative.

As previously stated in the Setting and definitions chapter, it will be irrelevant for the organisation which definition of knowledge or knowledge management they choose to follow. The key requisite is that all employees understand it in the same way. As long as all the people involved in the process are on the same wavelength, it will not matter if they differentiate

between tacit and explicit knowledge, or if they see the knowledge as tied to the knower. Explaining such abstract notions to everyone in the company will likely be a waste of time, or even worse, create more confusion. Employees "should be able to articulate the broader strategy and how his or her work is connected to it" (Labovitz & Rosansky, 1997, pp. 26-27). It is not necessary to teach the employees social science. Furthermore, using flashy slogans and scientific terminology might have a negative impact by making the employees feel like they are being condescended. Here is one example of such an occurrence. When Carlsberg attempted to spread their 'Winning Behaviours' in Malaysia, the local human resources manager said that the formulation "was 'too wordy' in relation to certain groups of employees" (Søderberg, 2015, p. 247). Furthermore, when the shop floor workers were asked what they understood from it, they said "they had to work faster to keep their job in the company" (Søderberg, 2015, p. 247). This represents an excellent illustration of a gap in perception, where the top management tried to implement an organisational change, but the rank and file employees perceived it in a totally different way.

Luckily, someone has already hammered out the concept of 'alignment', albeit in regard to economic growth and organisational performance. Labovitz et al.'s book boasts that alignment can, among other things, "give you the power to create an organizational culture of shared purpose" (p. xiii), in which "every member, from top management to the newly hired employee, shares an understanding of the business, its goals and purpose" (Labovitz & Rosansky, 1997, p. 4). This is the kind of environment in which a KM initiative has the best chances of success. According to the same authors, hundreds of senior managers pointed out profit as the main goal of their organisation (Labovitz & Rosansky, 1997, p. 14). It is very clear that effective KM can

boost profits, the problem is that it requires time to put in place, and the results are slow and hard to see. “Steady incremental improvement is not something that rivets executive interest” (Labovitz & Rosansky, 1997). This can lead to losing focus on the long-term goal, distracted by short-term, bottom-line improvements (Labovitz & Rosansky, 1997). In an aligned firm, employees know where the company is headed, so they are aware why something is required of them, and how their job fits in that picture (Minbaeva, Pedersen, Bjorkman, Fey, & Park, 2003, pp. 590-591; Labovitz & Rosansky, 1997, pp. 26-27).

While the literature so far proved to be limited in covering perception gaps, the concept of alignment puts it in first row. Davenport et al.’s paper talks briefly about ‘ground truth’ and Nonaka et al. treat perception gaps in one paragraph. Labovitz et al. state that “executives who create strategies in the isolation of their 20-th floor offices inevitably discover that their strategies do not match up with the environment of the street-level employees. To avoid a disconnect, there must be continual feedback between the two” (Labovitz & Rosansky, 1997).

One type of misalignment the authors identify is the “forked-tongue syndrome”, where a company “asks people to work as team players, yet rewards them for individual accomplishment”, or asks for changes in way things are done, but allocates no additional funding (Labovitz & Rosansky, 1997, p. 62). If a company continuously hires and fires people at a high rate, moves its employees around like pawns, and then turns around and asks them to share their knowledge ‘for the good of the organisation’, the KM initiative is doomed to fail. And since this paper is all about perceptions, it can also be true that the top tier of management in unaware that this is how the rest of the employees view the company. Of course, there are organisations that operate

in that way intentionally, but such firms will most likely not attempt KM implementation, and if they do, it would require a separate study.

Labovitz et al. acknowledge alignment to be more difficult to achieve as the company grows larger and more geographically distributed (1997, p. 75), which happen to be defining traits of MNCs in general, but if the task was easy, this paper would not have existed in the first place. One way of looking at this issue is to compare it with horse drawn carriages. Two horses pulling one carriage will be more effective than two separate carriages, each with one horse. In the old days, carriages would regularly have six or even more horses pulling, which was very effective, but the horses had to work in unison and pull together in the same direction. Greater speeds while pulling more weight could be achieved that way. Alignment requires getting a few hundred or even thousand 'horses' to work together in order to achieve greater goals.

One key aspect included in the concept of alignment is empowerment of the employee. If the people know the general direction in which the company is trying to go, they must have some degree of liberty in decision making. Translating this to KM initiatives, an employee will know what knowledge is most relevant and helpful for organisational growth, will be confident that they are not drained of knowledge and then fired, will receive appropriate recognition for the effort etc. Labovitz et al. describe a typical scenario, in which managers complain that employees can't be trusted to make the right decisions, and the employees complain that management is constantly second-guessing their decisions and reprimanding them if their judgment is considered misguided (Labovitz & Rosansky, 1997, p. 186). Such behaviour will inhibit people's willingness to contribute to the KM initiative. The authors do not argue for unchecked self-governance, of course, but instead recommend drawing up clear borders within which the

employees can act autonomously. This implies the requirement for a flat organisational structure, or “distributed leadership” (Labovitz & Rosansky, 1997, pp. 179-183).

So far, alignment does seem to cover a wide spectrum of human related obstacles for KM initiatives. This paper does not claim in any way that achieving organisational alignment is an easy task, but that a KM initiative has a significantly larger chance of success in an aligned company. When looking at some of the barriers to knowledge management implementation listed in the theory chapter, such as trust, acknowledgment, or motivation, it can be seen that gaps in perception can easily wreak havoc. Upper management may live under the impression that employees trust the company, feel acknowledged, and are motivated, hence devise any KM initiative accordingly. If the low-level employees don’t share in this view of the organisation, the chances of success under these circumstances will be extremely low. Furthermore, it might deepen the gap if employees who already don’t trust the company are asked to make extra effort for it.

In conclusion, this paper hypothesises that organisational alignment will help reduce the perception gaps between employees at all levels, but most importantly for the case in point, between upper management and frontline workers. Having all the ‘horses’ pulling in one direction should improve the chances of success for any KM initiative, and as seen from the literature review, there is a stringent need for such improvement. Keeping in mind that this approach will not ensure a one hundred percent success rate, it does, however, touch on most of human related barriers in the path of KM implementation. One of the greatest strength of aligning the perceptions on an organisation-wide level is that it will help expose issues that were

previously invisible, and thus left unchecked. No manager is going to take measures to improve trust or motivation, if they do not know that other people perceive them to be problematic.

When it comes to future directions of research, the best way of testing this theory would be longitudinal research, as KM initiatives take long time to put into practice. Observational studies can be done on MNCs attempting to implement knowledge management with the help of alignment. Measurements of perception gaps should be taken by means of interviews with upper management members, and through surveys for the rest of the employees. A better, deeper understanding would be provided by interviewing the employees as well, but the sheer number of rank and file workers typical for an MNC would make that unfeasible. Also, surveys done through e-mail or the company's intranet would ensure anonymity; employees may be reluctant to criticise the organisation or its management without the promise of namelessness. This is especially important for workers who perceive their employing company to be untrustworthy, in other words, where the perception gaps are the largest.

The evaluation of the gaps should be done prior to any organisational change related to alignment, as to asses to initial setting, and consequently as often as the researcher(s) see fit, also considering time and resources, in order to monitor any alteration in quantity and quality of the perception gaps. Availability of the interviewees must also be considered, also their disposition to participate; sending surveys every week will most likely irritate people and lower their willingness to cooperate. Multiple instances of MNCs should be evaluated, not just a singular case, to ensure research validity and reliability. Some organisations have managed to successfully implement KM without the help of alignment.

When it comes to data collection, key notions from the existing literature should be selected and included both in the interviews and the surveys. Critical factors should be selected from the existing literature, by means of measuring which are the most commonly pointed out as barriers for KM initiatives. From the literature review so far, the obstacles most frequently identified are trust, motivation, culture, and fear of knowledge drain. Such factors, or rather people's perception on them, must be measured throughout the process.

Given the length of the process, it would be quite surprising if no iterations would occur. As data is being collected, it is most likely that unforeseen factors would manifest, such as notions not included in the list mentioned in the previous paragraph arising as key factors. The interviews and surveys will have to be adequately modified to include them. There is also the possibility that new theories will be developed, and their inclusion in the research will be necessary.

This paper will most likely follow the same philosophical stance as this paper, namely social constructivism. As previously mentioned in the Methodology chapter, working with the concept of perception gaps under another philosophical assumption would drastically change the paper, both its design and purpose. Doing this research from an objectivist stance would require completely disregarding alignment and striving to find out which of the conflicting perceptions is false and which is real. Any strategy for KM implementation would consequently be devised around that set of perceptions.

As previously mentioned in the methodology chapter, some barriers will not be affected by the alignment process, namely language and cultural barriers. However, there might be an indirect effect on them too, by means of increased levels of trust across the organisation. Data collection, both interview and surveys, should pay special attention to these issues, and try to

gauge if any modifications occur regarding language and cultural barriers. Alignment is not able to teach people new languages or familiarise them with foreign cultures, but it will hopefully make it easier for them to work in an international setting.

An increase in the success rate of KM initiatives would prove the new theory correct, confirming the negative correlation between perception gaps and knowledge management implementation attempts. Much more importantly, it would pave the way towards a new approach to KM initiatives, one that ensures greater chances of success. Even more, alignment can bring many other benefits to a company. Successfully intertwining it with Knowledge Management would set the base for a new type of organisational strategy.

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