The Challenge of Knowledge Management in Small and Medium Enterprises (SMEs):
Subjective, Social and Political Dimensions

Thesis submitted for the degree of
Doctorate in Social Sciences
at the University of Leicester

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2018

Abstract

This study explores how and to what extent do subjective, social and political dimensions of the organisation condition perceptions and implementation of knowledge management (KM) in SMEs. The literature review showed that KM in SMEs has not been recognised as a priority in their agendas and in most cases, they practise informal KM. That is, without labelling it as KM and without initiatives such as strategies, policies, action plans, and projects guided by the relevant concepts and the specific terminology. The study found that KM is practised rather incidentally and informally as separate parts of IT tools and activities contributing to the organisational operation. How these organisations manage their knowledge depends mainly on the owner-director and their personal point of view (mental models and the quality of practical wisdom) in relation to other social, political and contextual factors. The heterogeneity of SMEs, in terms of ownership (family and non-family business), size, sector, knowledge-intensive and labour-intensive, informs how the actors understand and practise KM in organisations. Recently, a new prospect of KM has opened with the recognition of KM and the inclusion of organisational knowledge in the revised version ISO 9001:2015 'Quality Management Systems-Requirements' (ISO, 2015). However, hitherto this change in the standard has passed almost unnoticed by most organisations, and therefore it is still unknown how that will inform the practice of KM henceforth.

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List of Abbreviations

BPR	Business Process Re-engineering
CRM	Customer Relationship Management
EC	European Commission
EU	European Union
EU-28	European Union of 28 member states
GDP	Gross Domestic Product
HRD	Human Resource Development
HRM	Human Resource Management
ICTs	Information and Communication Technologies
ILO	International Labour Organisation
IM	Information Management
IPRs	Intellectual Property Rights
ISO	International Organization for Standardisation
IT	Information Technology
KIBS	Knowledge-Intensive Business Services
KM	Knowledge Management
LO	Learning Organisation
MIS	Management Information Systems
OECD	Organisation for Economic Co-operation and Development
OL	Organisational Learning
PDI	Power Distance Index
PIS	Participant Information Sheet
PKN	Personal Knowledge Network
R&D	Research and Development
SECI	Socialisation Externalisation Combination Internalisation
SMEs	Small and Medium-sized Enterprises
SWOT	Strength Weaknesses Opportunities Threats
TQM	Total Quality Management
UK	United Kingdom

USA	United States of America
USB	Universal Serial Bus
WWW	World Wide Web

Organisations which were participated in the interviews

MF-MEDIUM-FCOM1	Manufacturing Medium Family Company 1
MF-MEDIUM-FCOM2	Manufacturing Medium Family Company 2
TR-SMALL-FCOM1	Trade Small Family Company 1
SER-MICRO-COM1	Services Micro Company 1
TR-MICRO-COM1	Trade Micro Company 1
SER-MEDIUM-COM1	Services Medium Company 1
SER-SMALL-COM1	Services Small Company 1
SER-MICRO-COM2	Services Micro Company 2
SER-MEDIUM-COM2	Services Medium Company 2
TR-MEDIUM-FCOM1	Trade Medium Family Company 1
SER-MICRO-COM3	Services Micro Company 3
SER-SMALL-COM2	Services Small Company 2
SER-MICRO-FCOM4	Services Micro Family Company 4
TR-SMALL-FCOM2	Trade Small Family Company 2
MF-SMALL-COM1	Manufacturing Small Company 1
MF-SMALL-FCOM2	Manufacturing Small Family Company 2
MF-MICRO-FCOM1	Manufacturing Micro Family Company 1
MF-MICRO-FCOM2	Manufacturing Micro Family Company 2
MF-MICRO-FCOM3	Manufacturing Micro Family Company 3
TR-MICRO-COM2	Trade Micro Company 2
TR-MEDIUM-COM2	Trade Medium Company 2

Chapter I

Introduction

1.1 Background to the research

There is a widespread conviction that over the past 60 years the developed countries are leading a new economic and social change, which is characterised by a considerable interest in firm knowledge, learning and innovation. During this period, the business context is characterised by complexity in terms of an unprecedented manifestation of diversity, fluctuation and uncertainty, with knowledge becoming the fundamental economic resource and the stepping-stone to competitiveness (Bontis, Crossan and Hulland, 2002).The importance of knowledge and learning reached its peak at the end of the 20th century with academics, public policy makers, political institutions and business stakeholders entailing in their rhetoric labels such as 'knowledge economy', 'knowledge society', the 'learning organisation' (hereinafter LO) and 'knowledge management' (hereinafter KM).

As a point of reference, this thesis adopts the definitions of the 'European Guide to good practice in knowledge management of the European Commission for Standardisation'. Therefore, a broad definition of knowledge refers to '*a set of data and information (when seen from an Information Technology point of view), and a combination of, for example know-how, experience, emotion, believes, values, ideas, intuition, curiosity, motivation, learning styles, attitude, ability to trust, ability to deal with complexity, ability to synthesize, openness, networking skills, communication skills, attitude to risk and entrepreneurial spirit to result in a valuable asset which can be used to improve the capacity to act and support decision making. Knowledge may be explicit (codified easily shared and understood) and/or tacit (difficult to codify) individual and/or collective'* (CEN, 2004e:10). The above definition verifies that knowledge is an elusive complex concept and therefore it is difficult to describe its nature or to give a straightforward definition. Rooney (2005) maintains that a narrow perspective of knowledge as rational and scientific is at best deficient and at worse detrimental for knowledge policy. Therefore, a broad perspective of knowledge that encompasses the full spectrum of human experience and recognises the interrelated social nature of knowledge without excluding knowledge dimensions or generative mechanisms such as power, beliefs, intuition, ideas and fallibility seems more appropriate to KM (ibid). This thesis aligns

with this perspective and with researchers such as Alavi and Leidner (2001) and Hemsley and Mason (2012) who argue that the many dimensions of the nature of knowledge have their merit and place in KM implementation (see e.g. knowledge perspectives and their implications in Alavi and Leidner, 2001).

Knowledge-based economy refers to '*the stage of economic revolution in which knowledge is considered as the key factor of production and competitiveness*' (CEN, 2004e:10). LO is defined as '*the organisation that views its future competitive advantage as based on continuous learning and use of knowledge and an ability to adapt its behaviour to changing circumstance*s' (ibid:12). While KM refers to '*planned and ongoing management activities and processes for leveraging knowledge to enhance competitiveness through better use and creation of individual and collective knowledge resources*' (ibid:11).

The knowledge discourse has come of age to challenge old ways of thinking, pertaining to the multifaceted nature of knowledge and its role for businesses and society at large. Some researchers (e.g. Švarc and Dabić, 2015), who study the evolution of knowledge economy, claim that, according to EU statistics, knowledge-intensive activities that really require special expertise and scientific research, such as the knowledge-intensive business services (KIBS) and high and medium-high technology manufacturing sectors, remain cumulatively smaller than other parts of economy. In other words, since the beginning of the 21st century, the knowledge economy is implicitly identified with the evolution of the service sector, which is associated with activities that do not require special expertise and/or scientific knowledge. Hence, the concept of knowledge economy and the concept of knowledge, in essence, have diverged from their original scientific version to a service economy where knowledge is not considered only the product of scientific research (ibid). However, the recent global economic crisis became the cause of a complete overhaul of the sustainability of this paradigm shift (viz equating knowledge economy with service economy and knowledge generated as a service or creative activity) in the long run. It is for this reason that researchers like Švarc and Dabić, (2015) are sceptical about an uncritical dependence on services without reconsidering the role of scientific research and technological innovation.

As Spender and Scherer (2007) argue, though some pronounced the shift from capital intensity to knowledge intensity, yet there is no full evidence, nor could a knowledge-based theory of firm be ruled out. While most would agree that knowledge has always been important, or that it has always been the main driver of economic development, the proponents of knowledge-based economy (e.g. Apak and Atay, 2014:1261) maintain that nowadays there is adequate evidence that the competence to produce and utilise knowledge has greater explanatory value in conditioning standards of economic welfare and growth than previously. Consequently, many researchers attribute, to some degree, the emergence of the LO and KM as a response to the new socio-economic changes after World War II. This new era, according to Serban and Luan (2002), created new needs or demands that brought about the emergence and growth of KM. Reasons that justify the rise of KM include the information overload and chaos, information congestion, information and skill segmentation and specialisation, personnel mobility and turnover and competition (ibid:6).

The new characteristics of this economic transformation from the post-industrial society (approximately 1970 to date, see Goede, 2011:40) to the so-called knowledge economy (approximately 1995 to date see Goede, 2011:40) can be summarised, according to Roberts (2009:289), in eight core premises, namely the increasing importance of knowledge as both input and output and its impact across all economic activities, the commercialisation of knowledge, the rising proportion of knowledge workers, the rising importance of information communication technologies (ICTs), the globalisation as an enabler for knowledge economy expansion and the emergence of KM practices. The post-industrial society/knowledge economy thesis covers a wide range of interpretations. From its oldest version, as proposed by Bell (1973 in Hislop, 2009:4), which focuses on the science-based industries and the emphasis on theoretical knowledge that leads to innovation, up to the more narrow managerial approach emphasising the continuous learning and innovation within the firms (Drucker 1993, Nonaka and Takeuchi 1995, Prusak 1997 in Powell and Snellman, 2004:200), the proponents of the knowledge economy thesis, despite the problematic of measuring knowledge, have provided sufficient evidence in terms of the critical growing contribution of knowledge in developed countries (Roberts and Armitage, 2008). Even though the critics do not offer claims to infer that knowledge is not important to the new business context, or that there has been no social and economic change (Hislop, 2009:9), they do offer constructive

arguments and evidence just to remind us that the discussion on knowledge and its role in contemporary business remains undiminished.

One of the main criticisms refers to the extent that these economic and social changes represent an unprecedented deep rupture, capable of sustaining the emergence of a new type of society. That is, some researchers (e.g. Kumar, 1995 in Hislop, 2009:8) argue that, despite the changes, the new order maintains significant characteristics of continuity, implying that organisations in essence remain the same, in terms of the underlying imperatives of accumulation and social relations of capitalism. Another critique refers to the many different approaches to the concept of knowledge and their meaning and role in business organisations and society in general. For instance, privileging scientific or theoretical knowledge over other forms of knowledge, such as tacit knowledge and skills (e.g. Frenkel et al., 1995 in Hislop, 2009:7).

Moreover, some researchers (e.g. Roberts, 2009) put into question a global knowledge economy, due to the uneven distribution of knowledge-based activities and the failure to acknowledge the existing diversity of 'knowledges' in the world. These pieces of knowledge, mainly tacit in nature, are embedded in specific locations and communities and therefore are difficult to be codified and circulated across the globe (ibid).

In addition, Roberts and Armitage (2008), without suggesting that knowledge economy is an illusion, maintain that the purported knowledge economy suffers from side effects, or it is simultaneously an ignorance economy, for each of the above eight characteristics of knowledge economy is associated at least with one aspect of ignorance (see Table 1.1). Ignorance economy refers to deficiency of information/knowledge and awareness in general, but most importantly ignorance is characterised by inadequate understanding of the effects and consequences of people's actions. Therefore, the problem is the lack of appreciation of these elements of ignorance. On the contrary, conscious ignorance is another form of knowledge, and its acknowledgement can be a stepping-stone towards organisational improvement (ibid). One theoretical implication of Roberts and Armitage (2008) analysis, in relation to this thesis, is that it is worth KM policy makers considering the complementarity of ignorance with organisational knowledge as having a significant leverage effect on creation and innovation. Organisational knowledge, as a metaphor, can been seen as the reflection of the transformation of knowledge from individual level to

collective level by means of KM processes. In practical terms the element of ignorance can be an inextricable part of KM processes and more specifically to the processes of knowledge identification and knowledge creation.

No	Table 1.1	
	Knowledge economy versus Ignorance economy	
	Knowledge economy thesis	Ignorance economy thesis
1	We live in an era where knowledge is more important as an input to the production. Improved access to knowledge, specialisation and the division of labour brings about economic success.	Specialisation leads a typical worker to command only a small fraction of total knowledge used by economy than previous simpler less developed economies. Specialisation gives space to the demand for goods and services that the specialists are incapable to produce due to lack of time or knowledge. Specialisation is responsible for ignorance which can be exploited for commercial purposes.
2	The introduction and emphasis on ICTs enhanced information processing (codification), and facilitated knowledge diffusion, new production techniques and knowledge-based products. Collection and classification of information enable the transformation of information to create new knowledge.	Intensive codification in many cases leads to information overload and increased management tasks resulting in a kind of ignorance, for the organisation's capacity to manage and comprehend information is difficult to keep in pace with either the rapid accumulation of information or its management. In addition, it ignores the tacit nature of knowledge which is not amenable to codification.
3	The rising importance of knowledge as a commercial output readily amenable to marketisation brings about growth to knowledge-intensive market services and high technology intensive manufactures.	Ignorance can be seen as a commercial output in the sense that consumers know less and less about the sophisticated products they buy. On the one side consumers willingly purchase ignorance in order to secure a problem-free consumption, on the other side, businesses encourage consumer ignorance with purpose of increasing the demand for services and products.
4	The growing commodification of knowledge is associated with the growing importance of intellectual property rights (IPRs) as a means of competitive advantage.	The growing protection of knowledge either with intellectual property rights (IPRs) or secrecy or technology indicates not only the level of the commercialisation of knowledge but also the expansion of ignorance. The profitability of organisations that monopolise rights of the

		appropriation of knowledge depends on the growth of ignorance.
5	Knowledge workers are considered the essential resource for the firm's competitiveness and therebefore, there is an increasing demand for highly educated workers.	The increased specialisation leads to growth of ignorance and the need for standardised unskilled work with the objective to support knowledge workers.
6	The increasing impact of knowledge is not limited only in intensive and high technology sectors, but it is also expanding across all sectors of the economy in the form of intensive services.	The rise of the importance of intensive services and the demand for such services of all kind is generated by ignorance. Such services aim to preserving the ignorance of consumers on the condition that they do not need to be aware of something they can afford to buy.
7	The rise and the evolution of KM as a consequence of the recognition of knowledge as one of the most critical assets in economic activity.	KM can also be seen as symptom or inextricable part of the ignorance economy. The obsession with management of knowledge within organisations downplays the management of ignorance and its potentiality for contributing to exploration and creativity.
8	Globalisation is recognised as a key driving force of knowledge economies.	Globalisation reveals new areas of ignorance. Ignorance grows in parallel with every new knowledge. Globalisation also opens opportunities for monopolisation of knowledge by global regulatory regimes which result in the escalation of ignorance.
Source: Roberts and Armitage (2008)		

Within this economic context, as in any economy, small and large firms play a major dual role as the constituent building blocks and the agents of change (Cader, 2008:120). However, the contribution of SMEs in most countries surpass the contribution of large organisations. For instance, SMEs of Europe, USA, Japan, Korea and Taiwan, which constitute around 75 per cent of the world's economic output, contribute 50 to 75 per cent of the countries' Gross Domestic Product (GDP) (Sparrow, 2011:671). More recent statistics (EC, 2016) suggest that in the EU-28, SMEs in the non-financial sector account for 99.8 per cent of all enterprises, corresponding to the 66.8 per cent of employment and 57.4 per cent of added value. Fairly, then, SMEs have been characterised as the backbone of the EU-28 (ibid). Moreover, there is growing evidence in Greece (e.g. Markatou, 2012) and in other countries (Acs, 1996, Thompson and Leyden, 1983 in Zhou and Uhlaner,

2009) that small firms are emerging innovators, and therefore the assertion that innovation is a privilege of some large organisations (Schumpeter, 1934 in Markatou, 2012) has been challenged.

Though it is widely known that large organisations were the first to acknowledge and integrate KM initiatives in their business strategy (Beckman, 1999: I-2), that is not to say that knowledge and KM are less important for SMEs. There are many reasons why KM began and prevailed in large organisations. As large organisations usually possess more knowledge assets and intangibles, there is an obvious need for management (Wong and Aspinwall, 2004). In addition, in many cases large organisations are spread in many different business units across different locations, inside or/and outside a country, thus a KM system seems appropriate in order to facilitate knowledge sharing and transfer between these units (ibid). In fact, a KM system is more than a simple enabler. It refers to the integration of the organisation's people, processes and technology (Edwards, 2009 in Rodriguez and Edwards, 2011) in order to enable the effective practice of the dynamic and continuous phenomenon of KM within the firm (Alavi and Leidner, 2001).

KM is a challenge for all companies, whether large or small (Sparrow, 2001:3), for knowledge and learning are generally recognised as the most strategically significant resource and capability respectively (Zack, 1999 in Clarke, 2001:192). As Moran (1999 in Wong and Aspinwall, 2004) put it, the need for up-to-date knowledge is the same for the personnel of any company, whether small, medium or large. Some even argue that KM might be more crucial in SMEs, as knowledge can be their unique basic resource (Dotsika and Patrick, 2013 in Bolisani, Scarso and Zieba, 2015:3), or because as Durst and Edvardsson (2012:880) put it, in most cases SMEs do not have the resources to develop the potentialities of their knowledge stock (e.g. expertise and encoded knowledge in ICT systems). Moreover, some argue (Wong and Aspinwall, 2004) that SMEs are more vulnerable to competitive pressures than large organisations for two reasons. Firstly, SMEs have an intense competition between them, for they overwhelmingly constitute the majority of business entities in the economy. Secondly, some SMEs even have to compete with their large counterparts within an internationalised and globalised status of market characterised by liberalisation and deregulation (ibid). Another issue showing that the need for KM in small organisations is not less important compared to large ones is that the former are more vulnerable to knowledge loss (ibid; Lim and Klobas, 2000), for as

Penzer (1991) observed, some employees often use small firms as a stepping-stone for acquiring skills and then move to larger counterparts which can offer higher salaries and better career prospects. Last but not least, particularly newly-established small companies show high mortality rates (EC, 2016). Following similar statistics in the UK, Egbu, Hari and Renukappa (2005:7) mentioned that 36 per cent of SMEs are confronted with shutdown only three years after their establishment, implying the importance of KM for sustainable competitive advantage.

KM can provide several benefits to SMEs, such as acquisition of environmental information, the generation of new contacts (Birley, 1985 in Ceggara-Navarro and Martinez-Conesa, 2007:299), support in decision-making (Carson et al., 1995 in Ceggara-Navarro and Martinez-Conesa, 2007:299), better communication, upgraded external relationships and customer satisfaction, quicker response rates, improved efficiency in processes and procedures, development of innovativeness and downplaying the risk of loss of critical capabilities (Edvardsson and Durst, 2013a, Migdadi, 2009 in Bolisani, Scarso and Zieba, 2015:3). Despite the problematic of defining and operationalising the concept 'competitive advantage' and 'organisational performance', there is growing empirical evidence that KM practices can promote a company's competitive advantage and organisational performance (e.g. Andreeva and Kianto, 2012; Daud and Ysoff, 2010; Ha, Lo and Wang, 2016; Lee et al., 2016; Nguyen, Neck and Nguyen, 2009).

However, despite the increasing interest in KM since MacAdam and Reid (2001 in Wong and Aspinwall, 2004:44) had pointed out that the bulk of discussions on KM and relevant issues had been concentrated on large organisations, and little attention had been paid to small organisations, the literature concerning KM in SMEs is still limited and deficient, providing only some pieces of understanding rather than a holistic view (Durst and Edvardsson, 2012, Dwivedi et al., 2011, Ribière and Christian, 2013 in Bolisani, Scarso and Zieba, 2015:3). Whereas in most large organisations, KM implementation follows the formal route as part of their Management Information Systems (MIS) agenda, with the allocation of considerable ICT budgets to KM systems, in most SMEs this seems not to be the case (Lee and Lan, 2011:729). Some of the reasons that explain SMEs' attitude include budget constraints, lack of understanding of KM concepts and processes, lack of understanding of the complexity and scope of knowledge, human resource management problems (e.g. shortage of dedicated personnel and short-term employments), and

generally lack of appreciation of the benefits and expected deliveries of the appropriate KM implementation (Nunes et al., 2006).

Nevertheless, there is a general consensus that SMEs practise KM differently, compared to their large counterparts, for the former bear their peculiarities (Desouza and Awazu, 2006). In many cases, there is an absence of systematic KM processes and activities (McAdam and Reid, 2001; Wong and Aspinwall, 2005 in Durst and Edvardsson, 2012:880). Hutchinson and Quintas (2008) revealed that most SMEs adopt informal KM, that is, practices and tools used by a firm are not explicitly formalised in a strategic organised plan (Bolisani, Scarso and Zieba, 2015:6). Egbu, Hari and Renukappa (2005) indicated that SMEs practise some elements of KM, but in an ad hoc way, finding it difficult to deal with a complex integrated KM approach. In addition, Bolisani, Scarso and Zieba (2015), inspired by Mintzberg and Waters' (1985) work on deliberate versus emergent strategic planning, and previous works of Van den Hooff and Huysman (2009) and Sparrow (2005), showed that emergent approaches to KM with specific features can be found between small companies. Though this approach differs from other approaches and is congruent with most of the particular features of small companies, it is still early to infer its impact on the field. As research progresses, the differentiation among SMEs in terms of how they practise KM enlarges. This is founded on the fact that SMEs can vary significantly in terms of size, sector, country of origin, but it is also due to technical, personal and social aspects within the organisational context (Sparrow, 2011). For instance, two decisive differentiations among SMEs in terms of the adoption of formal KM refer to whether the organisation is knowledge-intensive or labour/capital-intensive (Nunes et al., 2006) and whether it is growth-oriented or growth-averse (Sparrow, 2011). Growth-oriented and knowledge-intensive organisations are more likely to adopt KM initiatives. Moreover, one should take into consideration that the recent and continued economic crisis might have caused additional differentiations to SMEs, which still remain under-researched. In other words, lessons learned and the impact of the crisis on stakeholders pertaining to KM are rather scarce, as those can be found only in literature after the emergence of the economic crisis in 2008.

1.2 Justification of research and the research problem

The context of KM research has been mainly formed in the United States and Western Europe, as the topic of KM has Anglo-American roots, with some Japanese influence attributed mainly to Nonaka and Takeuchi (1995) (Durst and Edvardsson, 2012:897). Though there are studies verifying that KM has spread worldwide, given the importance of SMEs, research contributions from other parts of the world, such as developing countries and Eastern Europe are rather limited (ibid). Likewise, in Greece, research studies in KM are rather scarce and especially focus on large and medium organisations (e.g. Samiotis, Polymenakou and Doukidis, 2003; Theriou, Maditinos and Theriou, 2011). Nevertheless, following the historical evolution of KM, some researchers (e.g. Tzortzaki and Mihiotis, 2014) argue that KM not only has surpassed the disputes of being a fad, but there is a trend in progress. This is also evident from the fact, as this is discussed in the literature review, that many researchers already referred to the third generation of KM (Snowden, 2002; Spender and Marr, 2005, Sveiby, 2005 in Tzortzaki and Mihiotis, 2014). The third generation does not annul the previous generations, but in fact revises the same constituent parts of KM, namely people, processes, technology and the context-culture, in terms of their role and emphasis. Bedford, Georgieff and Brown-Grant (2017) observe that the third generation is founded on first and second generation but explores further the semantics of knowledge and knowledge architecture. In this stage of KM, the importance of shared meaning created from shared context and the need the content to be abstracted from context came to the fore (Dalkir, 2005). According to Snowden (2002) the third generation is associated with a change in thinking of how knowledge can be managed, and it can be encapsulated in three heuristics: 1) *knowledge can only be volunteered; it cannot be conscripted,* 2) W*e can always know more than we can tell, and we all always tell more than we can write.* 3) *We only know what we know when we need to know it* (ibid: 102). The effects of this new way of thinking are associated with approaches which support communication between individuals, networks of knowledge, communities of practice (Schönström, 2005), change initiatives, agile organisations, complex adaptive systems (Bedford, Georgieff and Brown-Grant, 2017), sense making models (Snowden, 2002) and learning through generating activities based on dialogues and interactions in which the presence of Web 2.0 tools is also essential (Garcia, 2010).

However, the third generation of KM, as more complex and challenging so as to be responsive to the dynamic heterogenous business environment, unavoidably revealed

gaps in the current literature. Some researchers (e.g. Sparrow, 2011) indicated that the dominant research methodology in SMEs is based on surveys and measurements attached to the positivist paradigm. Qualitative research is relatively limited and is often descriptive with scarce grounded theorising (ibid). There is a need for situated holistic investigations of personal, social and critical understanding of the KM phenomenon, as this is taking place by stakeholders-actors within the SMEs context (ibid). In addition, there is a consensus about the primary role of the owner-manager and the fact that most SMEs are family businesses. However, some years ago, Thorpe et al. (2005) foresighted the need to investigate 'situated realities' of the dominant actors, that is, owners, entrepreneurs and managers. In other words, there is a need to study how the actors develop, apply and negotiate their personal beliefs within the organisation and how KM is often informed by conflicting business objectives (ibid).

Yet, the KM perception in SMEs remains open for further research, in order to cover the heterogeneity and complexity in SMEs. Even though there was a higher interest in the topic between 2001 and 2008, this interest has ceased since then (Durst and Edvardsson, 2012:884). The existing literature on SMEs is mainly focused on small and medium enterprises, while there is very little research concerning micro enterprises with less than 10 employees. Furthermore, the existing studies scarcely include in their qualitative interviews the views of first-line managers, middle managers and/or employees. Interviewing owner-managers and senior managers is a natural plausible assumption, due to their impact on decision-making. However, it is important to also take into account the voice of the lower staff, for it is plausible to assume that their views and attitudes could inform the KM processes, especially due to social and political issues, such as human relationships, power and control. For instance, in Durst and Edvardsson's (2012) literature review, which covered a large proportion of the available research, almost all the examined studies reported that KM in their organisations is positively considered among their members, with only one exception: the study of Bozbura (2007) in Turkey. In this study, the owner-managers of SMEs, the majority of which are family businesses, were sceptical and reluctant to knowledge sharing either in relation to the internal or the external environment (ibid). This was an interesting finding, even though the study (see Bozbura, 2007) examined only owners/senior managers of SMEs from the manufacturing industry and not from other sectors, such as the service sector and the trade sector.

In general, there are research gaps pertaining to how SMEs deal with the five basic KM processes (knowledge identification, knowledge acquisition/creation, knowledge storage, knowledge transfer and knowledge utilisation), and how these are informed by owner-managers' and the personnel's perceptions (Durst and Edvardsson, 2012).

More specifically there is a need to make distinctions in terms of the differentiation amongst SMEs and the subtle nuances of their owner-managers, managers and employees concerning their way of managing knowledge work. The nexus between personal, social and political manifestations of informal knowledge management approaches and the five basic KM process remains a challenge for further investigation. The fact that some owner-managers practise informal KM might be an indication that they have not been convinced of the full benefits of formal KM or that informal KM is perceived as an 'experiential learning process' that produces the needed KM capabilities.

At the same time, it is quite interesting and surprising that knowledge identification has received the least attention among the research studies in SMEs (ibid). Likewise, Tow, Venable and Dell (2012) showed that, while knowledge identification lies at the heart of KM and is one of the first processes to establish, the relevant literature pertaining to knowledge identification process is surprisingly rare. The importance of this process is obvious in definitions of KM as "…the flow of the right knowledge, at the right time, and in the right form to where it is needed…" (O' Dell and Grayson, 1997 in Anand and Singh, 2011:933; Mäki, 2008:53 in Tow, Venable and Dell, 2012:2). That is, without knowledge identification this KM definition is void.

Such gaps remain hidden and not easily identifiable, for, as has been discussed in the previous section, SMEs manage their knowledge without proclaiming KM programmes. This might seem odd to the orthodox managerial practice, wanting organisations to be in position to define KM, to establish a formal KM framework and systems and to measure or assess their progress. Though it is questionable to what extent concepts such as knowledge and learning are measurable, some might say (e.g. Garvin 1983:89 in Thomsen and Hoest, 2001:470) that, as long as you cannot measure something, you cannot manage it. However, such paradoxes rather intrigue the researcher's curiosity to investigate the aforementioned gaps. Moreover, these gaps are worthy of research, for they can bring about theoretical and practical implications. For instance, the fact that

SMEs manage their knowledge differently compared to larger organisations, and that they use rather informal unsystematic approaches, is simply the beginning of the story. There are at least two fundamental reasons that explain this theory-practice gap. Firstly, the heterogeneity within the SMEs. Secondly, the social nature of KM which is based on people and the complex issue of human relationships. As Jarrar, (2002:326) put it, KM is about 90 per cent people and only 10 per cent technology; that is, successful KM requires 90 per cent people-oriented virtues and culture and 10 per cent systems and Information Technology (IT). On the one hand, family SMEs are deficient in formal knowledge-sharing systems, enabling knowledge retention at organisational level (Vossen 1998, Zahra et al., 2007 in Lionzo and Rossignoli, 2013:584), which has a negative impact on the learning process. On the other hand, they often demonstrate a considerable level of informal network relationships (Arregle et al. 2007, Calabrò and Mussolino 2011 in Lionzo and Rossignoli, 2013:584). Such social relationships enable knowledge integration from a personal level to an organisational level (Tiwana and McLean 2005 in Lionzo and Rossignoli, 2013:584). Thus, the features of SMEs may enable or impede the presuppositions that enhance learning and facilitate change (Lumpkin, Martin and Vaughn, 2008 in Lionzo and Rossignoli, 2013:586). There is a lot of complexity here which in essence calls for qualitative research.

In this vein, the aim of this research was to investigate how and to what extent subjective, social and political dimensions of the organisation condition perceptions and implementation of KM in SMEs. The three dimensions were chosen, for they seem to constitute each one separately and all together a group of properties that determine the nature of knowledge and the ways of managing knowledge work. In the third stage/generation KM, the subjective/personal and social nature of knowledge is recognised as one of the main responsible agents for the complexity of KM (Grant and Grant, 2008). In addition, taking on the assumption that knowledge is not only a resource or a cognitive entity for exploitation but rather a process of knowing that is socially constructed and practised through interactions and interconnected practices, inescapably issues of power and control supplement the complexity of managing knowledge. In order to make the research problem more manageable to qualitative analysis, the previous core question was broken down into three sub-questions:

-How do owners/managers and employees if at all understand and practise KM in SMEs?

-How do the nature and structure of relations among the members of an organisation shape KM in SMEs?

-How do issues of power and control shape KM in SMEs?

As a reference point, these questions inform the selection of the appropriate methods and techniques in order to elicit rich data from the participants in relation to their organisational context.

Following the existing literature, it is deduced that the challenge of KM in SMEs remains vague. To a large extent the above three dimensions are responsible for the complexity of managing knowledge in tandem with the heterogeneity of SMEs, the conflicting characteristics of SMEs which either enable or impede KM initiatives, the conflicting interests of the basic actors and the informal implementation of KM without explicit or fragmented operationalisation of KM processes. This thesis offers the reader a chance to re-view and rethink the role of KM for SMEs and the impact of subjective, social and political dimensions on it. This is the main contribution of this thesis.

The following section provides an overview of the underlying rationale of the chosen methods and techniques, along with a descriptive and explanatory account of the process of inquiring.

1.3 Overview of Methodology

The aim of this section is to provide a brief description of how the research was designed and was carried out in terms of the underlying assumptions, procedures, decisions and ethical concerns, which are associated with specific methodological choices. A thorough presentation of the research is given in Chapter III.

The research adopted a qualitative research strategy, based chiefly on interpretivism and constructionism, which denote the epistemological and ontological orientation respectively. There were three decisive reasons in favour of this strategy, which is sensitive to revealing different nuances of meaning of social action in a field where the actors continually construct their realities. First, there is the nature of research questions itself, implying the need to grasp qualitative subjective meanings of social action within organisations. Second, the investigated subject topic as such, that is, KM in essence, as

has been mentioned in the previous sections, represents different 'social constructs' (e.g. formal or informal). Third, the human nature of the actor-participants as the primary sources of enquiry, and the researcher as an empathetic investigator, set the interface for interaction on an equal basis, though with distinct roles, in order to bring about meaningful interpretations.

Consequently, one of the most commonly used instruments for interactive data generation is the semi-structured face-to-face interview. This kind of interview is associated with considerable advantages and adjustability to the general qualitative 'lens' approach and the situated conditions. That is, semi-structured interviewing enables depth probing without losing control of the research scope. However, semi-structured interviews are not without disadvantages or weaknesses. Nevertheless, such problems were manageable, for they were identified in advance with proactive measures and appropriate procedures. A basic part of the semi-structured interview was the interview schedule, which was a well prepared and pilot tested guide, that enabled the interviewing process and later the analysis of data.

The strategy for finding and selecting participants included the most common method in qualitative research, that is to say the purposive. The sample size was originally designed to cover the minimum requirements of the research scope. That is, the provisional minimum number of interviews was 18, in order to cover the range of the size of organisations, micro, small and medium in three basic sectors, namely trade, services and manufacturing. The sample size was continually appraised, until there were indications that the collected data were capable of producing rich descriptions in order to answer the research questions. Finally, the field research was completed with 21 interviews from organisations of equal size (see table 3.1 and table 3.2). The participants' synthesis included primarily owners/owner-managers, but also gave voice to 3 managers and 6 employees. All the interviews took place in Attica, Greece, and were recorded with the explicit consent of the participants. Three basic assumptions informed the approach to the research process. The first assumption considers the researcher as the main research instrument of the research, who acts reflectively as an inextricable part of the research. The second assumption considers the qualitative research more as a craft rather than a method. Third, the researcher adopted a style known as 'empathetic neutrality' (Patton,

1990:41). The essence of these intertwined assumptions enabled the researcher to respond effectively to the complex and sometimes unpredictable social context.

For the analysis of the research data the researcher adopted the bricolage approach (Brinkmann and Kvale, 2015), which is associated with ad hoc techniques of interview analysis amenable to being responsive to the complexity of the social world. Consequently, the analysis of data included the transcription process, the coding process and the compilation of the analysis chapter as a patchwork. The analysis of data was an iterative back and forth process from the original recordings to the transcriptions, to the coding process and the analysis chapter. It is important to note that the analysis process in practical terms meant multiple readings, as well as listening from different perspectives by posing relevant questions.

Last but not least, the research took into consideration ethical issues and was granted ethical approval from the university standing responsible committee. The process of dealing with ethical considerations left the research in a stronger position in terms of its quality, for ethical considerations and qualitative research are intertwined. In practical terms, ethical considerations included proactive actions, such as identification and resolution of potential risks, securing the participants' anonymity and participants' ethical awareness and consent. Moreover, ethical considerations brought to the research front the capabilities and attitudes of a good researcher (Kvale, 1996, as explained in Chapter III: Research Methodology), which were espoused fervently by the researcher.

1.4 Outline of the thesis

This thesis follows a six-chapter structure. The second chapter, entitled 'Literature Review', presents the theoretical foundation concerning the topic of KM in relation to SMEs and coherent issues. The chapter begins with definitions and the delimitation of KM, and then reviews issues relevant to the research questions, concerning the subjective, social and political dimension of KM and the role of KM for SMEs in general, in the Greek context and in a period of economic recession. Chapter III, as mentioned in the previous section, refers to Methodology, which justifies a qualitative strategy as the appropriate approach to deal with the research questions. Chapters IV and V present the analysis of findings and discussion respectively. The final chapter provides the

conclusions and answers to the research questions. It also provides a brief discussion on practical and theoretical implications of the findings, a section of limitations and a 'final word-the big picture' paragraph.

Chapter II
Literature Review

2.1 Introduction

In a broad sense, KM refers to the deliberate synchronised integration of the members of an organisation in terms of how they deal with knowledge issues, tacit and explicit, in order to achieve collective ends. KM is not an ahistorical phenomenon. It is a dynamic evolutionary phenomenon with distinct characteristic phases that take place within and outside the organisational context.

The emergence of first generation of KM, which dates back roughly between 1990 and 1995 (Schütt, 2003), was associated with increased ICT capabilities and the need to identify, capture and store information for future use and decision-making support (Bedford, 2012; Hasan, 2011). The second age or generation of KM, approximately between 1995 and 2000 (Schütt, 2003), shifted the focus from IT and information accumulation to knowledge. First time from that period and afterwards, KM entered a 'problematic field of action' due to the debatable and multifaceted nature of the concept of knowledge. This period added new facets, one signified by the intense interest in tacit-explicit knowledge conversion suggested by Nonaka and Takeuchi's (1995) SECI model as a means of knowledge creation in organisations (Hasan, 2011). Consequently, the second generation of KM emphasises the sources of knowledge, namely people, communities and organisations (Bedford, 2012; Dalkir, 2005).

According to some researchers, (Snowden, 2002; Handzic, 2006) the contemporary KM, or third generation of KM, suggests that there is a need to manage holistically the three dimensions of knowledge, namely the content, the process and the context. Snowden (2002) explains that the third generation of KM offers a new way of thinking in terms of the multifaceted nature of knowledge and the paradox of it being viewed as a thing and a flow. Knowledge is not only something absolute susceptible to discovery through scientific investigation. Knowledge as a flow can be conceptualised from Stacey's (2001:4) definition of knowledge as '*an ephemeral active process of relating*'. Knowledge as a thing also refers to tangible encoded knowledge in computer systems and intangible expertise which resides in people's mind (Armstrong, 2006:174). A flow

represents the way in which knowledge is transferred or shared from person to person or from person to a knowledge database (ibid). As Snowden (2002:101) put it, the third generation is concerned with managing knowledge as a flow without abandoning the potentiality of managing knowledge as a thing. In order to achieve this, more focus is required on context and narrative/process than on content.

This shift of thinking from the first to the second and third generation makes clear the intimate relationship between knowledge and learning and the synergy between organisational learning (OL) and KM. The former is interested in how personal and collective learning is taking place within organisations and therefore focuses on the observation and analysis of the involved processes (Armstrong and Foley, 2003:74 in Dimitriades, 2005:320). OL is recognised to be taking place when individual and group level learning constructively inform organisational processes and structures. This transition becomes feasible when the members of an organisation are willing to engage with one another in a critical discussion on their established norms and practices (Hislop, 2009). OL is inextricably linked with any LO utilising effectively its knowledge resources to achieve higher performance (Pemberton and Stonehouse, 2000:184 in Dimitriades, 2005:320). The advocates of the LO usually define the LO as the organisation which supports the learning of its members and allows them to manifest and communicate this learning for the benefit of the organisation, within an organisational setting which promotes open dialogue, experimentation and risk taking (Hislop, 2009:99). This positive perspective considers the LO as the vision, the prototype all members of an organisation aim to become. Hence, the LO is identified by the commitment of its members to continuous individual and organisational learning and the deliberate and systematic efforts of coordination and integration of people, technology, processes, and organisational structure in terms of how they deal with knowledge issues, tacit and explicit, in order to achieve collective ends.

This thesis assumes that OL is an enabler for KM (Borjigen, 2015) and a required social process (CEN, 2004c) for KM implementation while the LO is considered as an ideal type of organisation, which has the capability to learn effectively and therefore to grow and develop successfully (Easterby-Smith and Lyles, 2011:3). This thesis also recognises the critical perspective on the LO as a means of power and control and an ideal which downplays politics and conflicts (Hislop, 2009). However, as some writers pointed out,

conflicts do not have necessarily deleterious effects provided that different opinions and conflicts are managed and negotiated through a constructive dialogue. In fact, such cases can actually promote learning (Coopey and Burgoyne, 2000, Huzzard and Ostergren, 2002 in Hislop, 2009:104).

Taking the above introductory working definition as a point of reference, this literature review unfolds by examining the difficulty in defining knowledge and KM. The historical review that follows presents the background and evolution of KM. The fourth section shows the synergistic relationship of the LO with the third generation KM and how the latter responds to learning and development issues within a complex chaotic context. The fifth section presents the most recognisable perspectives on KM, based on the four discourses of Schultze and Stabell (2004). The core of this literature review lies in the sixth section. The three sub-sections present respectively the existing theory, gaps and contradictions in terms of the impact of subjective, socio-cultural and political dimensions of SMEs on KM. The seventh section prior to the conclusion focuses on KM in SMEs, how they differentiate from larger organisations and how they respond to the challenges of KM, the economic crisis and the Greek business context. The conclusion section recaps and links the main debates, themes, gaps, ambiguities and unanswered questions with the research questions this study seeks to address.

2.2 The Concept of Knowledge Management

2.2.1 Defining Knowledge Management

Before defining the concept of KM itself, it seems reasonable to define its constituent parts, to wit knowledge and management. There is no single acceptable universal definition of the concept of knowledge or KM in the literature of KM. In fact, there is a variety of definitions and one can find many reasons for this. KM in one sense is a concept, that people have created rather than have discovered. From this perspective, KM is susceptible to take multiple descriptions. Dalkir (2005), for instance pointed out in a survey about 72 of the 100 published definitions of KM that were adequately consistent at least from three different perspectives: the business, the cognitive and the process/technology. In many cases these definitions verify the observation of some researchers (Baskerville and Dulipovici, 2006; Dalkir, 2005; Grossman, 2007; Jashapara, 2005) about the multidisciplinary nature of KM and that the KM literature is characterised

by different standpoints concerning the nature of knowledge epistemology (Alvesson and Kärreman, 2001;Hislop, 2009), a fact which supports the claim of Jashapara (2005) that the relevant literature is, to some extent, fragmented without consolidating theory. Moreover, KM tends to be seen within the literature as a situationally-specific, rather than universally identical phenomenon, for as Watson, (2003) notes, knowledge that is considered important, and the means considered appropriate for managing it, are likely to be different from one organisation to another.

Nevertheless, most researchers (Bhojaraju, 2005:39; Edwards, 2011:299; Masic and Djordjevic-Boljanovic, 2005: 73 in Draskovic et al., 2013:178; Pee and Kankanhalli, 2009 in Pasha and Pasha, 2012;) commonly acknowledge at least three interrelated basic components of KM, viz people (human resources), organisation (organisational processes) and Technology (information and communication mechanisms). Some researchers (e.g. Zhang, 2008:2) consider policy/strategy as the fourth component of KM. With these qualifying themes in mind, the discussion now turns to a dissection of the term 'knowledge management'.

2.2.2 What is knowledge?

Knowledge is a multifaceted term. Typically, the formally accepted definitions in Dictionaries define knowledge as *'1) familiarity or understanding gained by experience or study or from instruction, 2) a person's range or scope of information, 3) learning, science, the sum of what is known, instruction, wisdom, schooling, 4) Information, notice, 5) cognition, the process of knowing and 6) the philosophical view as certain or clear apprehension of truth or fact'* (Cassell, 1998).

Similarly, within the academic literature, there is no single universally accepted definition of the term 'knowledge'. Moreover, most definitions rarely fulfil the rules of a good definition as proposed by Papanoutsos (1985). That is, a good definition is a) concise, clear and succinct without redundant or vague information, b) defines the unknown with already known and familiar concepts, c) never cyclical, and d) neither wider nor narrower than necessary (Papanoutsos, 1985). Despite the variety of definitions, most of them share the personal character of knowledge and the element of action. The concept of knowledge can take many meanings (Alvesson and Kärreman, 2001) and standpoints.

For instance, Vo (2012) argues the case for maintaining the three main perspectives or epistemologies on knowledge, that is to say, positivist, non-positivist and pluralist in KM, but only through the lens of pragmatism as an encompassing alternative view. In fact, he considers the positivist and non-positivist opposition meaningless, as they characterise the first and the second generation of KM. Moreover, Vo argues, though the pluralist perspective is in the right direction, it lacks orientation and provides no clear basis for determining the right combination between positivist and non-positivist perspective. By taking the pluralistic point of view and by posing the presuppositions of knowledge, that is, knowledge in context and action and the feature of KM as 'reflective KM', the pragmatist perspective solves the eternal conflict between positivism and non-positivism, without annulling all of them, but some of them. From the pragmatist point of view, knowledge is, to some degree, universal and to some degree situated and its aim is to help people and organisations to excel and therefore requires from those who are involved and are in charge with the KM function to have an attitude of knowledge responsibility. The latter implies self-consciousness, reflectivity and chiefly people's willingness to learn from one another (Vo, 2012). Table 2.1 compares and contrasts the different perspectives in knowledge.

The positivist perspective or objectivist perspective finds its roots in positivistic philosophy, which assumes that general rules and principles shape social phenomena susceptible to be explained in cause and effect relationships (Hislop, 2009:19). Through this lens knowledge is considered an entity or objective fact and a product of an intellectual process. Tacit knowledge is downplayed while explicit knowledge is privileged (ibid). From this perspective the aim of KM is to capture, codify and disseminate individuals' knowledge by means of ICT so that it can be shared and used by the members of an organisation (Vo, 2012:79). This approach lays emphasis on knowledge use rather than knowledge creation, and KM investments focus on individual workers to the extent that facilitate the exploitation of information needed for their job (McElroy, 2000 in Vo, 2012:79). Other authors similarly describe this perspective as '*structural*', based on the epistemology of possession (Newell et al., 2009:7).

The non-positivist perspective emerged as an alternative to the positivist perspective and is associated with constructivism, phenomenology, interpretivism, idealism and hermeneutics (Jarzabkowski et al., 2010, Wicks and Freeman, 1998 in Vo, 2012:78). Lo

(2012) justifies the inclusion of the aforementioned paradigms under the non-positivist label /umbrella based on their theoretical commonality and to the fact that the development of these paradigms has not yet been crystallised. The kernel of this school of thought lies in the idea that reality and knowledge are socially constructed based on social interaction and erratic behaviour (Chiva and Alegre, 2005:58). Hence, knowledge is perceived as a social process which is informed by different operational contexts and the linguistic distinctions made by actors (Vo, 2012:79). From this perspective KM emphasises the importance of social interaction and communication by creating knowledge sharing environments, promoting social networks, developing communities of practice, where trust, norms and shared values are nurtured (Bresnen et al., 2003). In similar vein other authors (e.g. Newell et al., 2009) refer to the process and practice perspective, based on the epistemology of practice.

The pluralist perspective emerged as an alternative perspective that combines both positivist and non-positivist schools and therefore recognises the need to manage the different forms of knowledge within organisations (Vo, 2012). Consequently, researchers (e.g. Nonaka, 1994, Spender, 1996b) developed classifications of knowledge and typologies of knowledge as a means for managing the different types of knowledge (ibid). A well-known KM framework, that is compatible with the pluralist perspective, is Hansen et al.'s (1999) codification versus personalisation knowledge strategies. The latter responds to the positivist perspective and the former to the non-positivist perspective.

In sum, Vo (2012) suggests a pragmatist view that can be characterised as a sophisticated pluralistic perspective which shares considerable commonalities with the non-positivist perspective. Though this thesis assumes that this perspective is in the right direction, more research is needed in order to understand the multifaceted and multidisciplinary nature of knowledge and overlaps and antithesis of the different perspectives or models (e.g. Kakabadse, Kakabadse and Kouzmin, 2003, Newell, et al., 2009) in organisations.

Table 2.1		
Different Perspectives on Knowledge		
Positivist	**Non-Positivist**	**Pragmatist**
Knowledge is justified true belief (Spender,1996a; Chiva and Alegre, 2005)	Knowledge is socially constructed and held collectively in organisations (Vera and Crossan, 2005)	Knowledge is the outcome of enquiry (Dewey, 1938 in Vo, 2012)
Knowledge is a collection of representations of the world that is made up of a number of objects and events	Knowledge is not a representation but rather a constructing or creating acts, in other words, a process	Knowledge is a construction that is located in the transaction between persons and the environment
Knowledge is objective and universal	Knowledge is situated, continually reproduced and negotiated	Knowledge is provisional, partly universal and partly situated, embedded in situated practices of individual
Adapted from Vo, (2012)		

The KM literature offers a plethora of relevant definitions varying, as Beckman (1999) observes, in terms of scope, from narrow to broad and from practical to conceptual and philosophical. The mainstream literature generally avoids engaging in philosophical debates pertaining to the concept of 'knowledge per se' (Styre, 2003 in Hislop, 2009:16). On the contrary, most writers adopt a narrow perspective of knowledge in workplaces that recognizes its practical utility and competitive advantage as an asset susceptible to management control (ibid).

Generally, the KM literature according to Anand and Singh (2011) recognises at least three possible meanings of the term 'knowledge'. First, there is the state of knowing or to 'know about'. This corresponds to awareness and familiarity with principles, facts, methods, techniques and other elements. Second, there is the 'know how' which is

associated with the capacity for action of a knowledgeable person who is capable of making things happen. Third, the word 'knowledge' is taken by some to represent whatever is codified, to wit principles, facts, methods techniques, and so on, as a body of knowledge which is accessible in some kind of a reading form. The first and especially the second approach to knowledge are coherent to the non-positivist and pragmatist perspective, while the third approach is associated with the positivist perspective (see Table 2.1).

Mingers (2008) distinguishes four types of knowledge, three of them resembling the three Aristotelian virtues of knowledge (Richter, 2011) namely, epistémé, téchné and phrónésis. These are: (1) epistemological knowledge or scientific knowledge (epistémé, explicit in nature) 'to know why', (2) performative knowledge (Téchné, mainly tacit in nature) or know-how, which is the knowledge of practice based on skills and (3) experiential knowledge (phrónésis, tacit and explicit in nature), or practical wisdom, which is based on experience. The fourth type of knowledge in Mingers' view refers to everyday propositional knowledge 'to know that thing, fact and so on', which is very close to the concept 'information' which is generally explicit in nature (Richter, 2011). What differentiates Minger's view of knowledge from Anand and Singh's (2011) three senses of knowledge is the addition of wisdom, which is an inextricable part of contemporary KM literature. In essence, the above four types of knowledge end up representing two broad categories of knowledge, viz tacit and explicit.

Although the importance of tacit knowledge in KM has been expressed with many ways by several authors/researchers, there is no single acceptable definition or meaning of the term (Cowan et al., 2000, Castillo, 2002, Schultze and Stabell, 2004, Mooradian, 2005, Gourlay, 2006a in Muñoz, Mosey and Binks, 2015:289). A working definition of tacit knowledge according to McAdam, Mason and McCrory, (2007:46) suggests that the concept can be described as *'knowledge-in-practice developed from direct experience and action; highly pragmatic and situation specific; subconsciously understood and applied; difficult to articulate; usually shared through interactive conversation and shared experience.'*

In the management literature the concept of tacit knowledge holds a significant position due to its impact on personal performance, knowledge creation and knowledge

dissemination (Muñoz, Mosey and Binks, 2015:289). In addition, the role of tacit knowledge in SMEs is more evident because of flexible and less formalised organisational structure which would entail workers to develop multitasking skills and experience that would be mainly tacit (Eze et al., 2013:230). Marzo and Scarpino (2016) note that the role significance of tacit knowledge in SMEs outweighs that in large firms but the management of tacit knowledge remains emergent without any specific structured or formal way.

Armstrong (2006:176) highlights the importance of the concept by arguing that the main challenge and concern for KM is how to achieve the transition from tacit knowledge to explicit knowledge. However, there is a debate how and to what extent this transition is feasible. Some researchers maintain that tacit knowledge cannot be fully articulated, for that would be contradictory to its nature. Therefore, they suggest the name implicit knowledge as appropriate for the tacit knowledge that could eventually be transformed into explicit knowledge (Hertog and Huizenga, 2000, Wilson, 2002, Li and Gao, 2003, Freeze and Kulkarni, 2007, Frappaolo, 2008, Klein, 2008 in Muñoz, Mosey and Binks, 2015:291). Moreover, the role of tacit knowledge in the literature is also recognised in other forms of tacit knowledge such as intuition (Salas et al., 2010 in Muñoz, Mosey and Binks, 2015:291), sensemaking (Hill and Levenhagen, 1995 in Muñoz, Mosey and Binks, 2015:291), tacit skill (Ambrosini and Bowman, 2001, Ambrosini, 2003, Evans et al., 2004, Wier, et al, 2005 in Muñoz, Mosey and Binks, 2015:294), heuristics (Snowden, 2000 in Muñoz, Mosey and Binks, 2015:291) and wisdom (Rowley, 2006a, 2006b). This latter form of tacit knowledge is further developed in the following section.

Wisdom has become an important concept in recent discussions of KM, yet its nature and definition remain ambiguous. Rowley (2006a, 2006b) defines wisdom as the capacity to materialise the most appropriate behaviour taking into consideration what is known (that is, knowledge) and the consequences, ethical and social. This is not a straightforward or non-problematic definition. Rowley (2006a) acknowledges that there are points of friction (e.g. what is appropriate behaviour?) implying the need for further discussions. In the context of management, Rowley (2006a) claims that it is legitimate and beneficial to pay more attention to managerial wisdom and organisational wisdom. The former is associated with leadership and the capacity to take the right decisions in complex situations. The latter is founded on individual/personal wisdom and refers to the capacity

to materialise the right behaviour for an organisation, taking into consideration the existent knowledge and the legitimate intentions of its various stakeholders (Rowley, 2006a:1252).

Moreover, organisational wisdom entails the integration of individual/personal wisdom with other vital parts of the organisation, such as culture and structure, forming a self-action-oriented construct able to act wisely (Bierly, Kessler and Christensen, 2000). Put differently, organisational wisdom acts as the 'invisible hand', contributing to decision-making and shaping the conduct of organisational members.

In sum, in the organisational context wisdom is seen as being intertwined with knowledge in two dimensions: the subjective which is personal (e.g. managerial wisdom) and the organisational which is social. Small (2004) observes that there is relatively little written about wisdom in management literature. For instance, it is unknown to what extent people in SMEs consider (practical) wisdom or self-knowledge, which is a synthesis of a person's temporal experience of the social world, with a capacity to perform practical actions and solve problems within the social context (Butler, 2011:5), part of their KM and how it is shaped by subjective, social and political dimensions.

Some authors link practical wisdom and KM with Business Ethics (Rowley, 2006a, b; Rooney, and McKenna, 2007; Evans and McKinley, 2010). The literature behind wisdom is generally associated with ethics and conceives KM as more than just Information Management (IM). Wisdom and more accurately practical wisdom, 'phronesis' translated as prudence (Aristotle's Nicomachean ethics translated by Rackham, 1999:337) in KM is a concept commonly used when authors distinguish between data, information and knowledge (see e.g. Gurteen, 1998). In this view, KM is inconceivable without practical wisdom, (Jakubik, 2007), for the latter embraces one's principles needed for a wise judgment and subsequent decision-making. In the metaphor of a cake 'it is equated to judgements concerning which cake to make' (Gurteen, 1998). Authors who adopt a broad all-inclusive definition of knowledge consider wisdom as an inextricable attribute of knowledge (Land, 2009). Practical wisdom is also associated with tacit knowledge and the debate between tacit and explicit knowledge in the KM literature. Evans and McKinley (2010) claim that recognising both the promises and pitfalls of KM require

wisdom. However, despite the higher position in the knowledge scale, the role of wisdom in SMEs remains vague.

Most researchers seem to agree with Davenport and Prusak (1998) who argue that the knowledge to be managed encompasses both codified explicit knowledge and subjective, tacit knowledge that is difficult to codify (Metaxiotis, Ergazakis and Psarras, 2005). In this vein, Nonaka (1994), Nonaka and Takeuchi (1995), perhaps the most influential academics in their field (Asimakou, 2009:50), adopt the traditional definition of knowledge (as justified true belief) in their theory of organisational knowledge creation. Some researchers (Alvesson and Kärreman, 2001) see the dual character of knowledge (tacit-explicit) assumed by Nonaka and Takeuchi (1995) as an odd mixture of two contradictory approaches. The one represents the subjective, social constructed character of knowledge and the other the objective, true nature of knowledge. Undoubtedly, one of the main objections against Nonaka's (1994) popular spiral modes of knowledge creation[1] refers to his potentially problematic assumptions about the conversion of tacit knowledge into explicit and vice versa. This assumption is in direct contradiction with Polanyi's ideas. In Polanyi's view, tacit and explicit knowledge are inconvertible to each other and in the best case complement each other (Polanyi, 1966:20 in Schreyoegg and Geiger 2002). Here tacit knowledge is seen as an inherently personal and inextricable part of the knowing actor (Polanyi, 1958 in Schreyoegg and Geiger 2002). That is, tacit knowledge is inseparable from the knowing actor and her/his context (Cook and Brown, 1999:387). Moreover, Alvesson and Kärreman, (2001) observe that Nonaka (1994) specifically emphasises the importance of objective truth when conceptualising knowledge. However, he interprets 'justified true belief' with two semantic differentiations in order to be consistent with his theory. The essential attribute of knowledge in his view is 'personal belief' and the emphasis is on the justification. That is, 'truthfulness' is not the essential attribute of knowledge. Second, knowledge is not something absolute and static but rather a dynamic process of justification as part of a strong desire to reach 'truth' (see critique of Nonaka's model in Asimakou, 2009:52). Truthfulness, according to Nonaka (1994:26), chiefly corresponds to criteria contributing to the firm's development, that is, pragmatic

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[1] Known as SECI model, the acronym stands for, S: Socialisation, knowledge creation from tacit knowledge through tacit knowledge e.g. shared experience in everyday interactions, E: Externalisation, from tacit to explicit by using metaphors and analogies in communication interactions, C: Combination, from explicit knowledge to explicit by means of processes and information exchange, I: Internalisation, from explicit to tacit, a process that resembles learning.

considerations, cost, profit margin, product's merit and value premises. Such assumptions equate truth with the famous statement of Protagoras: 'Man is the measure of all things'. Consequently, Nonaka (1994:26) observes that there are also concerns for values and principles that transcend instrumental pragmatic considerations. To put it differently, Nonaka refers to idealistic pragmatism, which exercises control over means and ends based on practical wisdom which is a capability for making situated judgments (Nonaka and Toyama, 2007).

In addition, Tsoukas (1996) differentiates his position from Nonaka (1994) in terms of tacit-explicit knowledge. The former disagrees with the latter's distinction between tacit and explicit knowledge as two separate entities. Based on the assumption that all knowledge is always to a certain extent tacit and dependent on contextual factors, Tsoukas (1996) argues for the complementarity and inseparability of tacit-explicit knowledge, that is, two dimensions mutually constituted. Nonaka, (1994:16) and Thompson et al., (2000: 126 in Hamid, 2004:33-34) note that tacit knowledge includes both cognitive and technical aspects. The former consists of values and beliefs from broader social understandings, what Laird (1983 in Nonaka, 1994:16) calls 'mental models', that help people to perceive and shape their world. The latter consists of skills and know-how derived from practice and experience that is sharable among colleagues. However, their position is opposed to Tsoukas, who maintains that as long as all knowledge has its tacit constituent part, tacit knowledge is not susceptible to be converted into explicit knowledge (Tsoukas, 1996). Moreover, in a critique of this view, Wilson (2002) argues that Nonaka (1994) and Nonaka and Takeuchi (1995) fail to distinguish between tacit inexpressible knowledge and implicit unexpressed knowledge (e.g. knowledge taken for granted), but ultimately expressible and sharable via common experience. From their point of view, as long the so-called 'mental models' are unexpressed but ultimately expressible, then such knowledge constitutes implicit knowledge and not tacit knowledge.

In sum, one can infer that Nonaka (1994) assumes a broad definition of knowledge and borrows Plato's definition from the syntactic point of view rather than the semantic. Put differently, one has to disconnect Plato's definition of knowledge and its classical interpretation from Nonaka's point of view on knowledge. Plato conceives knowledge as a recollection based on human deliberation from sensations. That is, to Plato truth is associated with knowledge which is objective but hard to find. On the contrary, Nonaka's

(1994) knowledge is conventional with a social character through his SECI model of knowledge creation.

Notably Nonaka (1994:15) also draws a distinction between knowledge and information. The latter is a course of meaningful messages. Knowledge is the subsequent of this flow of information. People create knowledge from information in conjunction with their beliefs and commitments (ibid). Other researchers put into words the same broad scope of knowledge in a more descriptive manner, without making a distinction between information and knowledge. For instance, Davenport and Prusak, (1998) define knowledge as:

"*a flux mix of framed experiences, 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*" (Davenport and Prusak, 1998: 5).

However, Schreyoegg and Geiger (2002) see this catch-all definition as inconsistent and not practicable to KM. Their claim is simple: If 'knowledge is everything', then what is not knowledge remains undefinable, and therefore knowledge might be 'nothing'. Paradoxically, such a vague understanding of knowledge risks coming into direct contradiction with the increasingly popular belief which credits knowledge as the most valuable resource of sustainable competitive advantage. Put differently, some researchers deliberately prefer catch-all vague definitions of knowledge, so as to avoid excluding determinants of successful and effective action from knowledge (Spinner, 1994:24 in Schreyoegg and Geiger, 2002:5). In that sense organisations have to deal with ubiquitous everyday knowledge, without qualification criteria regarding what constitutes knowledge and non-knowledge. In an attempt to provide clearer parameters, Schreyoegg and Geiger (2002) suggest three qualification criteria which resemble the criteria of scientific knowledge: a communicative assertion, reasons for this assertion and verification by the discourse (community). In essence, organisations need to use knowledge from other communities and develop multi-criteria systems to run parallel, beyond their corporate discourse, other discourses and methods of verification. This perspective thus goes beyond a simple definition of knowledge, and begins to engage with the exploitation and management of knowledge in organisations. In particular, it advocates the importance of knowledge delimitation and, to a certain degree, de-contextualisation of knowledge (Schreyoegg and Geiger, 2002:12). Put another way, these criteria disconnect the notion

of knowledge from a single action-context and denote its social nature. Likewise, Schreyoegg and Geiger (2002) suggest that other types of knowledge or non-scientific knowledge require meta-knowledge qualification, based on their own related criteria. For instance, an organisation beyond the scientific knowledge criteria may seek the fulfilment of other criteria, such as profitability/non-profitability. The concept of knowledge is inherently predetermined by meta-knowledge qualification and communication, and therefore it requires the management of its content and context, in order to avoid knowledge disorientation (ibid).

In sum, while knowledge remains a fuzzy concept that is difficult to pin down, it sustains the interest of many people and many fields. Though it is tempting to immerse oneself in philosophical discussions concerning knowledge, few researchers follow this direction in the KM literature (Hislop, 2009:16). Most researchers narrow down the concept of knowledge so as to fit to the context and interests of KM, that is, practical utility and competitive advantage (ibid). Despite the varied typology on knowledge, tacit knowledge and explicit knowledge are by far the most cited types of knowledge. This technical distinction is a matter of debate in the KM literature. Most researchers recognise knowledge as the result of intellectual capacity and experience that fulfils certain criteria of verification. The latter remains a debatable issue between the different schools of thought. So, there is generally a consensus within the mainstream KM literature that it is possible for organisations to acquire organisational knowledge that is free from necessities of self-interest, infliction, sovereignty and power. However, it is not clear how organisational KM and the three dimensions of knowledge, namely personal, organisational and social, equilibrate between conflicting interests of stakeholders.

2.2.3 What is management?

A classical definition of management refers to a set of activities that direct and combine the resources of an organisation efficiently and effectively for the fulfilment of organisational goals (Griffin, 2008:4). In that sense, an organisation is a group of persons who collaborate in a structured and co-ordinated mode to fulfil particular objectives (ibid:3). This definition is widely used in the literature (Beijerse, 2000; McAuley, Duberley and Johnson, 2007:49) and is very close to what is known in organisational theory as the 'unitary view' (Burrell and Morgan, 2009:204). This view generally ignores issues of power within organisations. Moreover, it generally considers conflict as a rare,

manageable and occasional phenomenon caused by troublemakers. Beyond this view, other perspectives hold that the notion of management connotes manipulation and implies power and control (Land, 2009). In one sense management, from a political point of view, is a reflexive social exertion, which implies power over employees and power through employees (Clegg, 1989 in Filion and Rudolph, 1999:1; Willmott, 1984:350). This view of management is associated with 'the pluralist view' which regards the organisation as a loose group of people with divergent interests, which guide the common organisational goal to the extent that it serves the ends of the members of the group. This view deems conflict an inextricable feature of organisational life, while power plays an important role in everyday affairs in terms of understanding and managing conflicts (Burrell and Morgan, 2009).

A more critical definition (e.g. Ferris et al., 2000, Mintzberg, 1983, Pfeffer, 1981 in Sussman et al., 2002) sees organisations as political systems which make use of their power, influence and political manoeuvring to accomplish their goals both internally and externally. Hence, the political model considers organisations as pluralistic and separated into different subunits, each dedicated and attached to its own aims, interests and subcultures (Baldridge, 1971 in Varman and Bhatnagar, 1999:353). Under this perspective, interconnections with other subunits are causes and reasons for competition, negotiation and conflict. According to this model, organisational conflict is normal, or at least usual (Pfeffer, 1981a:28 in Varman and Bhatnagar, 1999:353). In fact, some people might find it difficult to (fully) agree either with the unitarist or the pluralist view about what an organisation is. The organisation theory provides quite different perspectives and nuances of the concept of organisation (e.g. Burrell and Morgan, 2009; Hatch and Cunliffe, 2006:14). However, where one can place SMEs in the organisation theory is open to discussion. SMEs as organisations bear some special characteristics. Essentially for example, in SMEs that are family-owned, issues of power and human relations take particular meaning.

In sum, the concept of management is a provocative concept. The unitarist perspective seems to ignore issues of power and control, or assumes that organisations function well only within a context which is free of tensions and conflicts. From a different perspective, management connotes manipulation and control, and consequently conflicts are inevitable. As far as the concept of knowledge is concerned, there are three key themes

that deserve particular attention before proceeding to the concept of KM. First, there is no consensus or a universal definition of knowledge in the KM literature. Second, the prevalent types of knowledge that sustain the interest in the KM literature refer to tacit and explicit knowledge. Third, there are researchers who define knowledge as a fluid concept, and therefore they suggest a practice-oriented KM approach independently and without referring to any theory of knowledge (e.g. Davenport and Prusak, 1998). On the contrary, some other researchers, (e.g. Nonaka 1994; Tsoukas, 1996) make links with theories of knowledge. Nevertheless, KM processes in practice have been evolved either with or without a theory of knowledge, for knowledge is generally acknowledged as a key asset for organisations' competitive advantage. However, as Draskovic et al., (2013:169) put it, knowledge is a necessary but not adequate condition to bring about a competitive advantage to organisations. In essence, it is management and appropriate management skills that make knowledge the main asset for competitive advantage. Hence, the next paragraph examines how the concept of management specifies its role in the concept of KM.

2.2.4 What is Knowledge Management?

From the analysis of knowledge and management individually, one can infer that the combination of these two concepts brings about contradictions and debates and makes unfeasible a unified definition of KM. Considering the divergent conceptual approaches to knowledge and management, KM seems a problematic concept and authors have characterised it as an 'odd couple' (Alvesson and Kärreman, 2001), an 'unfortunate oxymoron' (Sveiby, 2001), 'nonsense' or in the best case a 'utopian ideal', which is actually more likely to bring about unsatisfactory results (Wilson, 2002). Nevertheless, some authors (Alvesson and Kärreman, 2001) acknowledge that, despite the ostensibly oxymoronic character of the concept, it still sustains the potential for making sense. For instance, McInerney and Koening (2011) question the argument that knowledge is non-manageable in every respect. It depends on how one understands the terms 'knowledge' and 'management', for some of the many flavours of meaning for knowledge and management (e.g. from Webster's Collegiate Dictionary: 9 for manage and 8 for knowledge equals 72 combinations) really make sense (ibid:3). From a different point of view Snowden (2002) rejects the oxymoronic claim of KM. The latter, he claims, is not an oxymoron if we acknowledge the paradoxical nature of knowledge being both a thing and a flow.

Taking on the assumption that KM belongs to the category of those entities people create rather than discover, KM becomes ontologically subjective rather than objective. Put differently, understanding KM primarily from its synthesis (wholeness) instead of its constituent parts seems an ontologically consistent argument. KM is not the product of a mere synthesis of two objective and/or subjective entities, to wit knowledge and management. Consequently, KM becomes contextually and situationally dependent. In that sense, the obsession of finding one single acceptable definition of KM becomes meaningless. Moreover, empirical evidence (Zhu, 2004) suggests that the claim towards a universal concept of KM is weak, undesirable and counterproductive. Cross-cultural context studies reveal different KM styles which offer beneficial opportunities for interaction and exchange of ideas. How then can KM be conceptualised? Dalkir (2005) suggests that as long as KM is context-dependent, defining KM is a matter of concept analysis within each organisation. The components of a concept analysis technique consist of fundamental key attributes, examples and non-examples. The convergence on necessary and sufficient key attributes delimits the presuppositions for an acceptable definition of KM among the members of an organisation.

However, while Dalkir emphasises the context-specific nature of KM, he does provide a general working definition:

'KM is the deliberate and systematic coordination of an organization's people, technology, processes, and organizational structure in order to add value through reuse and innovation. This coordination is achieved through creating, sharing, and applying knowledge as well as through feeding the valuable lessons learned and best practices into corporate memory in order to foster continued organizational learning' (Dalkir, 2005:3).

Dalkir's definition is employed in this thesis. This is primarily because, following Müller-Merbach (2005), it fulfils the presuppositions of the Aristotelian 'Four Causes' approach to knowledge. Contemporary application of this model (e.g. Killeen, 2001, 2004 in Behaviourism; Alvarez, 2009:46 in Psychology; Whitty, 2013:101 in Project Management) consider the Four Causes a dynamic approach that explains how a thing is what it is in a series of interdependent events-agents that lead to a purpose or intent. As Politis (2004:55) points out, the motivation behind the Four Causes model is to address the question 'what is change?' and the Four Causes model provides an integral explanatory account for change.

An adaptation of the Aristotelian framework for Dalkir's (2005) definition takes the following form:

- **'Formal cause' refers to:** The conceptualisation of KM, the pattern of KM, how people visualise KM, the potentiality of existence as such, what we expect from KM, the essence of KM, what KM actually is (Linguistic approach: definition of the essence), that is with reference to Dalkir's definition as provided above:

'*KM is the deliberate and systematic coordination of an organization's people, technology, processes, and organizational structure in order to add value…*'.

- **'Material cause' refers to:** the prime constituent parts in terms of people, material things, abstract and concrete, the organisation, information technology (IT) (Linguistic approach: definition of the components) that is:

'*…people, technology, processes, and organizational structure…*'

- **'Efficient cause' refers to:** Human activities in the workplace, human expertise, knowledge sharing and communication, formal and informal (Linguistic approach: definition of the mobiliser or the moving cause of change) that is:

'*…This coordination is achieved through creating, sharing, and applying knowledge as well as through feeding the valuable lessons learned and best practices into corporate memory…*'

- **'Final cause' refers to:** The final purpose of KM (beyond any intermediate objectives or purposes) in terms of abstract and concrete things, creation of new knowledge, informed databases, innovation, and competitive advantage (Linguistic approach: The definition of the purpose of the essence) that is:

'*…in order to add value… in order to foster continued organizational learning.*'

In sum, KM is a conscious activity for change in terms of how an organisation deals with a valuable asset, that is to say knowledge, so as to fulfil their objectives. According to Rahimli (2012) and other researchers, knowledge is a primary source of competitive advantage, and research studies suggest a highly positive correlation between sustainable competitive advantage and KM. As Oldenkamp (2001:411) puts it, KM is a means to an end and not the end itself.

As a common base of understanding of what KM is in practice, this thesis takes as a practical introduction to mainstream thinking in KM 'The European Guide to Good Practice in KM' of the European Committee of Standardization (CEN, 2004a, b, c, d, e).

This guide consists of five booklets. The first booklet refers to a KM framework and sets the general context for KM at both personal and organisational level. The KM framework provides a schematic picture of how the basic components of KM business processes, core knowledge activities and enablers relate to one another, in order to facilitate KM implementation. The core knowledge activities consist of knowledge identification (e.g. methods and tools such as systematic search strategies, brainstorming, mapping techniques and customer feedback), knowledge acquisition/creation (e.g. research and development function, communities of practice, expert recruitment), knowledge storage (e.g. databases), knowledge sharing (e.g. collaboration, teamwork, job rotation, information communication systems, mentoring) and knowledge use (as knowledge sharing tools and evaluation of knowledge, whether the previous activities and efforts pay off and add value). The other four booklets that form this integrated guide of good practice refer to 'Organisational Culture', (CEN, 2004b), that is, the creation of the appropriate culture for KM implementation, (CEN, 2004b), 'SME Implementation', (CEN, 2004c), 'Guidelines for Measuring KM' (CEN, 2004d) and 'KM terminology' (CEN, 2004e).

2.3 Historical Review of Knowledge Management

By tracing the origins of the concept of KM, we can begin to put the above discussion into context. There is no agreement pertaining to the origin of KM. In a general sense the concept of managing knowledge has deep historical roots (Land, Nolas and Amjad, 2005). From the very early years of humanity people saw the need to transfer knowledge to their peers and next generations. Such exemplars include the first hunters who share their knowledge, expertise and skills so as to ensure the viability of their group or community. Likewise, in the popular psyche, wise people willingly pass their knowledge to the next generations (Wiig, 1997). Nevertheless, the concept of KM in its current sense in the business sector dates back to the end of the 20th century (ibid; Dalkir, 2005). However, there is a debate over who first coined the concept. Some credit the concept to Dr Karl Wiig in 1986, in a keynote speech at a European management conference under the aegis of the International Labour Organisation (ILO) of the United Nations (Beckman, 1999:1-2; Dalkir, 2005:15). Others bestow the concept to Marchand (1985) in the 1980s, (Koenig, 1992a in McInerney and Koenig, 2011:2). In that period and earlier, the consulting companies realise the potential to exploit their own gained experience via

information technology (IT), as a new product to sell to other organisations. Hence, consulting firms call this 'product' KM (McInerney and Koenig, 2011:2).

Sceptics might see this movement simply as a replacement of the declining fortunes of the waning re-engineering programmes (Prusak, 1999 in McInerney and Koenig, 2011:2). Likewise, Metaxiotis, Ergazakis and Psarras (2005), link the origins of KM in its contemporary sense with business improvement fields such as human resource management (HRM), total quality management (TQM) and business process re-engineering (BPR). Adopting a broader view, Wiig (1999) describes the emergence of KM as the inevitable result of several societal, intellectual and business factors. Such factors include the globalisation of business, workforce mobility, technological advances and competition which, it is commonly argued, demand leaner organisations prepared to work smarter and faster (Dalkir, 2005:18). The proponents of this evolutionary perspective of KM (Wiig, 1997) consider its development as the natural result of cultural, economic and industrial developments which briefly form in two words the character of our society, to whit 'knowledge society'. This concept denotes the shift of emphasis from natural resources or operational efficiency to human expertise and knowledge as a means of competitive advantage. KM is a dynamic developing phenomenon in progress. According to Snowden (2002), KM is at the forefront of a management movement that puts emphasis on shared context, that is, the members of the organisation delimit and organise content to the extent that it is recognisable, accessible and applicable. In fact, the previous two generations of KM, imply the other two components of KM. So, the first generation emphasises containers or information technology (IT). Here, the focus is on how to systematise and control existing knowledge in order to achieve improved streamlining (McElroy, 2000 in Hovland, 2003). The second generation emphasises the human factor, cultural dimensions (Dalkir, 2005:19) and shifts the focus on enhancing the conditions for creativity (McElroy, 2000 in Hovland, 2003). From a process-oriented perspective, the second generation embraces and supports continuous organisational learning (ibid) as a social process based on collective actions and interactions (Pasteur, Pettit and van Schagen, 2006) among the members of the organisation. This approach emphasises the intimate relationship between knowledge and learning (although distinct) as co-dependent inseparable entities (ibid).

According to Handzic (2006) and Snowden (2002), KM has now entered its third generation. Since the advent of this generation, writers have increasingly emphasised the tricky nature of knowledge as a thing and a flow, and acknowledged the need to manage the tripartite of knowledge, namely the content (the known, knowable, complex and chaos), the process/narrative and context (the level of abstraction and culture).The fact that many KM initiatives in organisations fail, despite the isolated success stories, make some researchers sceptical about its impact on competitive advantage (Davenport et al., 2008, Malhotra, 2004, McAfee, 2006, Nonaka et al., 2000, Pollard, 2003, Wilson, 2002 in Chatti, 2012). Others (e.g. Chatti, 2012) deem that it is time to abandon the traditional models of KM which consider knowledge as an object and /or as a process. These KM models mainly fail to cope with the complex mutable knowledge environment, for they put high emphasis on technology (Davenport et al., 2008, Delmonte and Aronson, 2004, Malhotra, 2005 in Chatti, 2012) at the expense of the human and social factor (Davenport et al., 2008, Malhotra, 2004, McAfee, 2006, Nonaka et al., 2000, Pollard, 2003, Wilson, 2002 in Chatti, 2012).

A characteristic example of this new tendency of reshaping the concept of KM comes from Chatti (2012), who proposes the Personal Knowledge Network (PKN) model. This alternative model acknowledges the complex nature of knowledge as both personal and social, as a mesh of personal networks which adopts a knowledge ecological perspective on KM. The knowledge ecological perspective is the heart of the model which integrates personal and organisational knowledge emerging from an organic connection of self-organised entities and PKNs. People in the knowledge ecology are independent and autonomous. They constantly reshape their PKNs which mould their identity and knowledge origin instead of creating a common identity by means of membership in a community of practice (ibid). While this model bears characteristics of the learning organisation and the third generation of KM, its application yet requires empirical verification.

The Historical review showed that the evolution of KM is in progress. It seems that the concept of KM sustains the interest as a tool for practitioners and as a discipline for researchers and academics. Contemporary KM originally started with a simple promising proposition, that IT capabilities were to bring about organisational efficiency, especially dealing with information management. In the process, KM grasped the challenge to

manage the complex personal and social nature of knowledge which is abstract, tacit and contextual. However, as Tzortzaki and Mihiotis (2014) observe, although KM passed the test of being just another managerial fad, it is not clear what the future direction of its development would be, mainly due to conceptual indetermination and inadequate research background. Perhaps one solution to get closer to the existing nature and value of KM would be to understand how KM makes sense and connects to already established practices (Spender, 2006:239).

Last but not least, the historical evolution of KM has recently been marked with the recognition of KM and the inclusion of organisational knowledge in the new version of ISO 9001:2015 'Quality Management System-Requirements' (ISO, 2015). The responsible committees for ISO 9000 quality management system standard decided to incorporate the concept of KM in the new version of ISO 9001:2015 after the received results of a worldwide survey in 122 countries (Wilson and Campbell, 2016:831). The survey was launched in 2010 (Jarvis and MacNee, 2011) and KM was one of the six concepts which received the highest score of responses to question number 10: 'How important is it to incorporate the following concepts into ISO 9001?' (Wilson and Campbell, 2016:832).

2.4 Knowledge Management, Learning and Development

Hislop (2009:93) delimits organisational learning as the institutionalisation of personal and team level learning in organisational structures and processes by means of reflection on and modification of fundamental norms and values situated in organisational processes and structures. First, this definition recognises and distinguishes the different loci of learning, that is, personal, team or group and organisational (Antonacopoulou, 2006 in Hislop, 2009:93) and their dynamic inter-relationships (Crossan et al., 1999 and Zietsma et al., 2002 in Hislop, 2009:93), implying that it is erroneous to consider organisational learning as the sum total of individual or group learning (Vince, 2001 in Hislop, 2009:93). Second, this definition denotes two different learning levels (Argyris and Schön, 1978), the lower level which is single-loop learning (learning without questioning theory), and a higher level which is double-loop learning (learning with questioning of assumptions and theories). Third, this definition signifies the cognitive, the cultural and the behavioural/action-based learning modes.

Recent literature (e.g. Easterby-Smith and Prieto, 2008) makes clear more than ever the intimate relationship between OL and KM. This comes in parallel with the evolution of KM and OL and the emergence of the third generation and double-loop and triple-loop learning respectively (Pun and Nathai-Balkissoon, 2011). Moreover, the third generation of KM is associated with a dynamic capabilities perspective which aims to clarify how organisations acquire and sustain a competitive advantage within a constant fluxing environment.

On the other hand, double-loop learning is associated with innovative processes (Bennet and Tomblin, 2006, Pemberton and Stone house, 2000, Rowley, 2006 in Pun and Nathai-Balkissoon, 2011: 205), the willingness to change an organisation's underlying rules and principles (Argyris and Schön, 1978:3 in Romme and van Witteloostuijn, 1999:440) and the collective restructuring of problems, policies, objectives and mental models (Snell and Man-Kuen Chak, 1998 in Romme and van Witteloostuijn, 1999:440). In addition, triple-loop learning proceeds one step further towards transformational learning where 'organisations learn to learn' proactively, (Pun and Nathai-Balkissoon, 2011: 206) as a form of 'collective mindfulness' (Romme and van Witteloostuijn, 1999:440), which critically substitutes or changes organisational strategies and context. Triple-loop learning has been recognised as more than another form of learning style (Bartunek and Moch, 1987, Torbert, 1994 in Easterby-Smith and Lyles, 2011:188) and as the higher order capability (Collis, 1994 in French, 2009:66). Triple-loop learning can be seen as the highest manifestation of OL which is associated with learning processes supporting changes in routines and resources. In other words, triple-loop learning results in a change in knowledge and capabilities at an organisational level. In a broad sense, capabilities are repeatable patterns or routines that enable the operation of an organisation (Sanchez, 2003). What makes the capabilities dynamic is their capacity to reconfigure and change.

The current literature seems to converge on the notion that KM and OL have a synergistic role to play in a wider integrative context (Pun and Nathai-Balkissoon, 2011), for both share an interdependence with the organisational context, that is, organisational culture, organisational structure and organisational infrastructure (Pemberton and Stonehouse in Pun and Nathai-Balkissoon, 2011). In addition, OL underpins KM and Dynamic Capabilities (Easterby-Smith and Prieto, 2008) with the latter denoting the organisation's capacity to demonstrate competencies to deal with alterable environments (Teece, Pisano

and Shuen, 1997 in Easterby-Smith and Prieto, 2008:237). Some researchers (Vera and Crossan, 2003 in Easterby-Smith and Prieto, 2008:242), in order to show the close relation between KM and OL, regard the former as 'managed learning', for they consider that OL can be described in terms of KM processes such as knowledge creation, retention and use. A good exemplar of how KM and OL link together derives from Senge's (2006:3) definition of the Learning Organisation (LO) as '*the organisation where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together*'. In other words, as Pun and Nathai-Balkissoon (2011) maintain, there is a growing consensus that KM and OL work together as sub-concepts to bring about a learning organisation. This relationship is illustrated by Armstrong (2006:5, 534, figures 1.1 and 35.1 respectively) who places KM as a component of Human Resource Development (HRD) which is part of the Human Resource Management (HRM).

All in all, the close relationship between OL and KM is apparent from the fact that most academics (Real, Leal and Roldan, 2011:1105) increasingly agree that OL is a process which begins with acquisition and creation of knowledge at some personal level and proceeds with its interchange and integration before becoming a body of collective knowledge. However, this point of convergence between KM and OL was not always self-evident. It is worth noting, that such perceptions are rather rare at the beginning of KM. During the original formulations of KM, known also as the first generation, researchers (Dalkir, 2005, McElroy, 2003, Ruggles, 1998, Schreiber et al., 2000 in Jorna, Faber and Hadders, 2009:282) pointed out that the highly technocratic orientation of KM at the time primarily focused on information technological applications.

However, more recent research into workplace learning has generated a growing consensus that social based learning in the workplace occurs continuously even when it is unnoticed and occurs informally by means of human interactions (Jordan, 1993 in Ali, Warne and Pascoe, 2011:1000). Social learning includes knowledge and practice transformation procedures and procedures that promote generative learning, that is, learning that aids the organisation to respond appropriately in dynamic and unexpected situations (Ali et al., 2011:1000). Hence, learning that takes place in organisations is a kind of social learning (da Costa, Oliveira and de Souza, 2011:113) which is now

considered an inherent part of KM (Ali, Warne and Pascoe, 2011:1000). Research evidence shows the increasingly symbiotic relationship between the two concepts of KM and OL. For instance, Liao and Wu's (2009) findings show a positive correlation between KM and OL, that is, organisations with more KM develop a higher capacity in enhancing OL. To put it in another way, organisations aiming to develop KM initiatives, which entail information sharing and knowledge creation, need to embrace organisational learning processes and strategies.

2.5 Different Perspectives on Knowledge Management

Despite the variety of perspectives concerning knowledge and KM that have accumulated over the years, some researchers (Schultze and Leidner, 2002; Schultze and Stabell, 2004; Hislop, 2009) contend that it is possible to discern some broad perspectives or discourses based on distinct underlying theoretical assumptions. For example, Schultze and Stabell (2004) suggest four discourses on KM within a framework of two dimensions in an adaptation of Burrell and Morgan's (2009) paradigm of social and organisational enquiry. Schultze and Stabell's (2004) framework is being used in this thesis as a conceptual approach which is useful as a starting point in the study of knowledge management in organisations. The framework provides awareness of the different perspectives of knowledge and knowledge management by using figurative language, which enables interpretive flexibility compatible with the complexity of social phenomena and situated nature of knowledge. (see Table 2.2).

Table 2.2	
Four Discourses on Knowledge Management	
EPISTEMOLOGY	
Duality	**Dualism**

		Dialogic Discourse	**Critical Discourse**
SOCIAL ORDER	**Dissensus**	**Organisational context:** Based on suspicion, conflict of interest, conflict over order **Knowledge metaphor:** discipline, as both a system of knowing and correcting **Knowledge in organisation:** to bring about marginalised and multiple knowledges, and to deconstruct totalizing knowledge claims and power relations **Theories:** post-structuralist, postmodern	**Organisational context:** Based on suspicion, conflict of interest, conflict over order **Knowledge metaphor:** power, as both a toaa of oppression or a tool of emancipation **Knowledge in organisation:** to bring change and new social order through awareness of inequalities and structures of oppression **Theories:** labour process
		Constructivist Discourse	**Neo-functionalist Discourse**
	Consensus	**Organisational context:** Based on trust, common interest, hegemonic order **Knowledge metaphor:** mind, as a mindful action by interdependent persons who share their partial knowledge **Knowledge in organisation:** to bring about the integration between personal, social knowledge and action without destroying personal autonomy and identity **Theories:** practice-based, structuration	**Organisational context:** Based on trust, common interest, hegemonic order **Knowledge metaphor:** asset, as an object of ownership and exchange that produces value and competitiveness **Knowledge in organisation:** to bring about the necessary enlightenment for progress in organisational effectiveness and competitive advantage **Theories:** resource-knowledge based view

Source: Schultze and Stabell (2004) four discourses on KM

One dimension consists of the epistemological assumption of duality and dualism. The other dimension entails the two poles of social order, namely consensus and dissensus. Though there is a general consensus that the constructivist discourse and the neo-functionalist discourse prevail in the KM literature (Hislop, 2009), the latter is by far the dominant within the mainstream (Schultze and Leidner, 2002). The dialogic discourse and the critical discourse represent the less utilised perspectives and the latter seems to attract the least research attention (Schultze and Leidner, 2002; Schultze and Stabell, 2004; Hislop, 2009).

Nevertheless, beyond this technical classification, the question is to what extent these discourses apply independently or in combination in real organisational conditions. Although the majority of the literature supports singular, non-pluralistic approaches, some researchers (Guo and Sheffield, 2007; Jackson, 2005; Powell and Ambrosini, 2012; Schultze and Leidner, 2002) argue for the simultaneous application of multiple perspectives or pluralism. For instance, Sheffield (2009) shows through a case study how hard-positivist, soft-interpretivist and critical perspectives, which emphasise objective facts, social norms and personal values respectively, can be intertwined in a single instance. Different KM perspectives thrive in pluralistic frameworks in the same way as objective facts, social norms and personal values, respectively, are intertwined (ibid).

All in all, therefore, the KM literature suggests that the dominant KM discourse is aligned with neo-functionalism which itself is intertwined with the first generation of KM and the resource-based view and an emphasis on Information and Communication Technology (ICT) development. However, the evolution of KM over time and the emergence of the second and third generations of KM show that the constructivist discourse and the other two discourses, critical and dialogic, have their place in dynamic and complex environments. Moreover, considering that SMEs rely less on sophisticated ICT systems and more on informal KM activities (Nunes et al., 2006), the role of the other discourses remains challenging. Hence, this thesis is particularly interested in probing these less developed perspectives on KM through the investigation of the subjective, social and political dimensions of KM in SMEs.

2.6 Issues of Knowledge Management

2.6.1. The Subjective Dimension

The operationalisation of subjectivity begins by identifying the different subjects and their role within organisations (i.e. employees, managers, owners, permanent employees (full time or part-time), temporary employees and apprentices). The way in which each person perceives the role and the purpose of KM describes the subjective dimension of KM.

It is widely recognised (e.g. Desouza and Awazu, 2006; Wong and Aspinwall, 2004) that the owner-manager is central to the cultural and structural life of the SME, and so his or

her subjectivity could be regarded as being of fundamental importance to the way in which the firm engages with KM. Firstly, for example, there are debates over the extent to which the gender of the owner-managers affects their attitude towards KM, and management more generally. Lu, Leung and Tremain Koch (2006, in Amayah, 2011) suggest that women prove to be more altruistic than men and are prepared to spend more time helping and sharing their knowledge with others within the organisation.

Other studies have found similar evidence to suggest gender differences in relation to KM. For example, Mukhtar (2002) reviews a range of research, and finds results indicating more formal, autocratic management styles among men, and more participative, co-operative and communicative styles among women. Yet, among small firms, Mukhtar finds a slightly different trend, where male owner-managers adopt a more collaborative, participative approach that, in their view, better meets business needs, and female owner-managers rely more on their own intuition and are more likely to pursue personal goals above business needs. Mukhtar thus emphasises that a more 'subjective' approach to KM and management may be adopted more by women than by men. However, these findings are inconsistent with other studies (e.g. Mäkelä, Andersson, and Seppälä, 2011 in Amayah, 2011) which fail to verify a significant statistical relation between gender and knowledge sharing in multinational companies.

Another distinction that we need to be aware of, in terms of how subjectivity may impact upon KM, relates to the difference between entrepreneurial, growth-oriented SMEs and other types of SMEs. Although some people often describe all owner-managers as entrepreneurs (Hasle et al., 2011), it is necessary to distinguish between owner-managers and owner-entrepreneurs (Beaver, 2003b in Hasle et al., 2011:624). This is because a minority of owner-managers of small firms are primarily growth and profit oriented when they start a new business. The majority of owner-managers highly value autonomy and the option of providing good services. Research results verify that such motives, rather than rapid growth, urge most owner-managers to set-up their business (Woldie, Leighton and Adesua, 2008). Recent studies, after the emergence of the economic crisis in 2008, claim that the majority of Greek entrepreneurs have established their business out of necessity, while the majority of their counterparts in EU reported opportunity as the most important motivation for setting up a new business (EC, 2016).

As far as the already established businesses are concerned, many owner-managers are averse to expanding their firms for fear of losing managerial control (Beaver, 2003a, Curran, 1986, Scase and Goffee, 1980 in Hasle et al., 2011:624). On the other hand, research evidence suggests (Sehhat and Fooman, 2014) that the owner-manager who acts as an educated, skilful and experienced entrepreneur is more likely to bring about positive results in their company concerning growth, profitability (i.e. performance) and survivability. Other researchers (Minniti and Bygrave, 2001 in Westhead, Ucbasaran and Wright, 2009:663) maintain that experienced managers might be reluctant to keep pace with new perspectives and changing environments.

According to many writers, owner-managers within SMEs represent the company's most important source of capabilities and competencies (Wong and Aspinwall, 2004) and usually act as the knowledge repository of the firm (Desouza and Awazu, 2006). As such, their own attitudes and dispositions become central in shaping the approach to KM adopted by the firm (Sparrow, 2011). This centrality is capable of bringing about contradictory perspectives or even catastrophic results in some cases. For instance, as Gerber (2001) argues, SMEs often are established by technicians, specialists or other professionals with limited experience in the field of management. Sometimes such people run into problems, for they focus on their field of expertise and neglect managerial skills. That is, they are reluctant to entrust a manager to run their company or to acquire managerial skills themselves (ibid). Moreover, whether the shared organisational culture is open and innovative or closed and rigid in its attitude towards KM depends to a large extent on how the owner-managers set the tone (Dasgupta and Gupta, 2009).

Other writers have identified owner-manager succession problems as a potential barrier to effective KM in SMEs (e.g. Feltham et al., 2005 in Bracci and Vagnoni, 2011). Durst and Wilhelm (2012) attribute this problem to the owner-managers' reluctance to share their knowledge and expertise systematically before relinquishing their leadership. Owner-managers' fear of losing control is not something new. Researchers (Gils and Zwart, 2004 in Sparrow, 2011) claim that the owner-manager's openness to knowledge sharing depends on overcoming the fear of transferring their knowledge and expertise and losing their vantage position. The relationship between sharing knowledge and personality is not something new in the KM literature. Knowledge sharing is a key process in KM (Amayah, 2011) and empirical studies suggest a positive relationship between the

former and firm innovation (Liao, 2006 in Amayah, 2011), improved employee and firm performance (Verburg and Andriessen, 2011 in Amayah, 2011), and expansion of productivity (Quigley et al., 2007 in Amayah, 2011).

Even KM initiatives, supported by significant financial and human resources, potentially fail (Wang and Noe, 2010:116) with one reason being the lack of attention paid to the subjective and affective reasons for knowledge hoarding such as personality traits (Amayah, 2011). In fact, there is no consensus among the researchers as to which personality traits are positively or negatively related to knowledge sharing and in turn to improved KM practice.

For instance, many writers have tried to draw connections between the 'Big Five' typology of personalities and approaches to knowledge sharing (Peabody and Goldberg, 1992 in Gupta, 2008). Yet, among the five personalities (openness to experience, agreeableness, extraversion, conscientiousness, neuroticism), 'openness to experience' shows the strongest consistent relationship with knowledge sharing, that is, the higher the level of openness the higher the propensity for knowledge sharing (Cabrera et al., 2006, Matzler and Müller, 2011, Matzler et al., 2008, Wang and Yang, 2007 in Amayah, 2011).

The second personal trait refers to agreeableness and in this respect the research findings are conflicting. We might find it reasonable to assume that people of such a disposition will willingly share their knowledge. However, while some researchers (de Vries, van den Hoof, and de Ridder, 2006, Matzler et al., 2008 in Amayah, 2011; Gupta, 2008) verify such an intuitive conclusion, others (Wang et al., 2011, in Amayah, 2011) suggest that agreeableness has no impact on knowledge sharing in environments where employees consider themselves accountable for knowledge sharing in exchange of offered rewards.

Most researchers agree (de Vries et al., 2006, Ferguson et al., 2010 in Amayah, 2011) that extraversion is positively related to knowledge sharing, regardless of accountability associated with reward policy (Wang et al., 2011, in Amayah, 2011). The explanation possibly stems from the fact that extraversion and the desire to acquire status go hand in hand (Barrick, Parks, and Mount, 2005 in Amayah, 2011), hence the latter is considered a strong driving factor for knowledge sharing (Ardichvili, 2008 in Amayah, 2011).

As far as conscientiousness is concerned, the findings contradict one another. Conscientiousness characterises self-disciplined, organized and responsible people, who behave in a way that fulfils others' expectations (Wang, Noe and Wang, 2011:987). Some researchers (Gupta, 2008; Matzler et al., 2008; Mooradian et al., 2006, Wang and Yang, 2007 in Amayah, 2011; Matzler et al., 2011) maintain that conscientiousness is positively related to work performance and knowledge sharing. Moreover, according to writers such as Matzler and Müller (2011, in Amayah, 2011) conscientiousness relates to learning oriented persons which in sequence are more likely to a demonstrate positive attitude pertaining to knowledge sharing. Other researchers (Cabrera et al., 2006, Teh, Yong, and Chong, 2007 in Amayah, 2011) find no significant statistical correlation between conscientiousness and knowledge sharing.

Likewise, most researchers (e.g., Gupta, 2008; Wang and Yang, 2007 in Amayah, 2011) fail to find a significant relationship between the fifth personality trait, namely, neuroticism and propensity to share knowledge. The research findings of Matzler et al., (2011) demonstrate that knowledge sharing depends on support from both structure and agency. According to their verified model, agreeableness is positively associated with affective commitment to the organisation which consequently explains knowledge sharing practices. This finding has clear pertinence for KM and employees' willingness to share knowledge and calls to mind Senge's (2006:202) assertion that real commitment is rather rare in organisations. Senge argues that in most cases, 9 times out of 10 what appears as commitment is in fact compliance (ibid).

Research studies such as Matzler et al's, (2008, 2011) have two important limitations. First, they operationalise individuality with reference to only two or three variables from the 'Big Five' typology of personalities. Second, though knowledge sharing is generally a fundamental presupposition for KM (Amayah, 2011), that is not to say the former is the only presupposition for the latter. In order to avoid such reductionism, Hsieh, Hsieh and Wang (2011) show the effects of personality based on the 'Big Five Model' on four dimensions of KM, namely knowledge acquisition, knowledge accumulation, knowledge sharing and knowledge application. They find that all five personality traits, to wit, conscientiousness, agreeableness, emotional stability, openness to experience and extroversion have a significant impact on knowledge acquisition only. Consciousness and agreeableness have no significant impact on knowledge application. Openness to

experience has no significant impact on knowledge accumulation and knowledge sharing. In the same way, extroversion has no significant impact on the latter. From the above results, one can infer that the impact of personality on knowledge sharing and KM becomes much more complicated when it comes to explaining how these personality variables relate to one another and to KM. Moreover, personality dispositions and other subjective dimensions do not operate in vacuum. In fact, they take place within the internal and external organisational context and are subjected to the impact of social and political factors.

Last but not least, some researchers (Pan and Scarbrough, 1998 in Ismail and Yusof, 2010; Ardichvili, 2008 in Amayah, 2011) have shown that trust and trustworthy people are prerequisites for knowledge sharing. Additionally, Ismail and Yusof (2010) claim that what really matters is the quality of knowledge sharing. Whereas their findings suggest a significant relationship between the three individual factors (viz trust, awareness and personality) and knowledge sharing quality, personality scores the higher values of significance followed by trust and awareness. One of the limitations of their study is that they assume personality only in two types, extravert and introvert. Nonetheless, the role of trust remains an important issue to KM according to some research findings (Usoro, Majewski and Kuofie, 2009 in Amayah, 2011), for the former as antecedent influences the five personalities accordingly.

In sum, there is no clear consensus in the literature concerning exactly how subjective dimensions influence KM. Though there are consistent signs that particular personal traits correspond to knowledge sharing attitudes, such correlations remain quantitatively and qualitatively vague. Despite the acknowledged benefits of the Five Personality Traits model (see e.g. McAdams, 1992) this model and similar ones are important models in personality studies but cannot be considered a universal 'integrative model of personality' (ibid).The critics of the five-factor model of personality (e.g. Boyle, 2008) argue that the model bears some significant weaknesses (e.g. that it is inadequate to capture dynamic behaviours with very few personality traits, that it is disconnected from physiological mechanisms or to neurochemical brain processes, that it is difficult to replicate and so on).That is not to say however, that the model is useless. As McAdams (1992) puts it, its merit depends on how one contextualises this model in the complex field of study. And more broadly, writers are increasingly in agreement that individual subjectivity is an

important conditioning factor in the implementation and success of KM; it is in the specifics of this relationship that there is perhaps less agreement. This is an area in which this study aims to make a contribution.

Finally, trust as a prerequisite of knowledge sharing and the latter as prerequisite for KM can be seen from two different intertwined points of view: the personal and the social. The first considers knowledge sharing as an option of value or threat, while the latter as a necessary social construct to human relationships that is influenced by social structures. How these two dimensions interact with one another and shape KM perceptions within SMEs remains a gap in the KM literature. This research aims to shed some light on this issue.

2.6.2 The Social Dimension

The social dimension refers to 'the nature and structure of relations' among the members of an organisation (de Souza and Preece, 2004, Dyer and Nobeoka, 2000, von Krogh, 2002 in Bolisani, Scarso and Di Biagi, 2005:149). The particular interest in this thesis is how the social dimension influences KM in SMEs. Under the social dimension umbrella, interpersonal relationships, interpersonal trust, group identity and organisational culture are some of the influential factors potentially concerning KM.

The nature of employment relationship

According to Wilton (2011), there are three main perspectives in terms of the nature of employment relationship. The unitarist perspective considers organisations to be unified entities, implying that the members of an organisation share common objectives. The pluralist perspective takes a more moderate position, acknowledging both common and diverse objectives among the organisation's members. Finally, the radical/Marxist perspective deems the employment relationship a matter of class conflict rather than group conflict. The conflicts of interest are deep, for they stem from the incompatible capital and labour relationship (Wilton, 2011:277). Put differently, those writers who determine the nature of relationships based on internal organisational factors are more likely to converge with the unitarist perspective. Conversely, those at the other pole believe that external factors dominate over internal factors. Many researchers (Edwards, Sengupta and Tsai, 2010; Gill, 1985; Kinnie et al., 1999; Rainnie, 1989) determine the

nature of SMEs' employment relationship according to both poles, the firm's particular structure-idiosyncrasy and external factors within an unstable environment.

More specifically, the literature on small businesses suggests two types of firms. The first refers to the 'small is beautiful' perspective implying family atmosphere, harmonious working relations and little bureaucracy. The second type is the 'bleak house' version, which is associated with poor working conditions, conflicts, instability and authoritarianism, as nobody dares to challenge the owner-manager (Wilkinson, 1999). However, other researchers (Curran, 1986; Ram, 1991 in Wilkinson, 1999) find this polarisation overly simplistic. That is, the spectrum of working relationships potentially involves complexity, informality and contradiction beyond the simple, harmonious or autocratic, description. How people in SMEs apprehend the nature of employment relationship is the first step in understanding the social dimension of organisational issues such as KM.

The social psychology of KM

Studies of the social psychology of KM (Kimmerle, Wodzicki and Cress, 2008) maintain that social norms and social identity have a strong effect on KM and particularly on knowledge sharing and processing. In an earlier study, Chua (2002) argues that the relational dimension of social interaction, which consists of social norms, social identity and the level of care, have the strongest influence on knowledge sharing and the quality of knowledge creation. That is not to say that other dimensions of social interaction, such as the cognitive and the structural (Nahapiet and Ghoshal, 1998 in Chua, 2002), are insignificant. On the contrary, the structural dimension, which defines the characteristics of the social system (Granovetter, 1992 in Chua, 2002) and refers to impersonal arrangements of relations between persons and units, are acknowledged to have a significant influence upon knowledge creation. Similar results derive from the cognitive dimension which relates to those mental means (e.g. language, narratives and codes) contributing common representations, interpretations and systems of meaning among the participants (Cicourel, 1973 in Chua, 2002).

In sum, Chua concludes that among the three dimensions of social interaction, the relational dimension with the three facets, social norms, the sense of identification and the level of care, demonstrates the highest correlation to the quality of knowledge

creation. Social norms are unwritten rules and standards, acknowledged by a group at a team or organisation level, that shape their behaviour without making appeal to laws (Cialdini and Trost,1998 in Kimmerle, Wodzicki and Cress, 2008), and therefore are major constituent parts of organisational culture (Adkins and Caldwell, 2004, Glisson and James, 2002 in Kimmerle, Wodzicki and Cress, 2008), for the latter entails explicit expectations with regard to employees. Put differently, organisational culture refers to the injunctive or prescriptive norms (Cialdini et al., 1990 in Kimmerle, Wodzicki and Cress, 2008) which specify how people ought to behave in their context (Kitts and Chiang, 2008). In addition, the descriptive norms denote patterns of behaviour (Kitts and Chiang, 2008) that shape the organisational climate (Bartels et al., 2007, Chen and Huang, 2007 in Kimmerle, Wodzicki and Cress, 2008), that is, how people interact with one another in certain situations form normative behaviour. Hence, in organisations where knowledge sharing is the norm, employees who identify themselves with the organisation are more positive about sharing their knowledge (Kimmerle, Wodzicki and Cress, 2008). Other researchers (Roberts, 2006, Usoro et al., 2007 in Hislop, 2009:160) verify similar results with communities of practice. Nevertheless, there are potentially negative side-effects of group identity. A number of studies (Hislop, 2003, Newell et al., 2000 in Hislop, 2009:160) show that people who strongly identify themselves with the community might feel reluctant to share their knowledge to the extended community, that is, the other members of the organisation. Analogous results (Currie and Kerrin, 2003 in Hislop, 2009:160) testify that strong sub-cultures within the organisation demonstrate unwillingness to share their knowledge beyond their intimate area. In other words, people share their knowledge to the extent that they trust one another.

As far as care in organisational relationships is concerned, the findings (Krogh, 1998 in Chua, 2002) indicate its accumulative positive influence on behaviours such as mutual trust, empathy, fairly tolerant judgment and willingness to help. From a different perspective Barachini (2009) finds in his study that knowledge sharing is mainly based on the business transaction process, that is, people do not share information or knowledge for free. In Barachini's view, people share their knowledge as an exchange process mainly motivated by four reasons: justify or refute a view, learn from one another, develop trust and fulfil their own goals. It is this latter motivation that supports the business transaction theory in terms of knowledge sharing (ibid). Put another way, either self-interest or

altruistic motives explain personal goals which enhance satisfaction and therefore is highly valued by humans.

All in all, though there is strong evidence that the social psychology of KM within an organisation is mainly shaped by relational dimensions based on social norms, caring and the sense of identification, at least two observations challenge this inference: first, the potential of strong sub-cultures within the organisation, and second, Barachini's (2009) findings which in fact imply that the underlying motives of social behaviours (e.g. knowledge sharing) remain to a great extent personal and subjective.

Inter-personal trust shapes inter-personal relationships

Many researchers (Abrams et al., 2003, Adrews and Delahaye, 2000, Ardchvilli et al., 2003, Davenport and Prusak, 1998, Levin and Cross, 2004, Mooradian et al., 2006 in Hislop, 2009:156) recognise the fundamental role of trust in encouraging people to willingly participate in knowledge sharing activities and processes. Interpersonal trust is inherently a relational social dimension which denotes personal interdependence, risk-taking on behalf of the trustor and expectations that the trustee honours their obligations (Lane, 1998 in Petrakis and Kostis, 2015). Interpersonal trust is seen as the product of emotional affiliations among persons (Yamagishi and Yamagishi, 1994 in Petrakis and Kostis, 2015) and a relationship invested on trust is built in anticipation of reciprocity or mutual benefit (Hislop, 2009:156).

It is widely observed that the members of family SMEs have strong bonds due to their kinship ties. This is consistent with the observation that the level of trust increases as one moves from nonexistent ties with strangers, weak ties with co-workers, to stronger interpersonal ties with friends and family members (Iglic, 2005 in Petrakis and Kostis, 2015). Such strong ties are described as emotionally intense, supportive and capable of encouraging people's motivation (Krackhardt, 1992, Rus, 1999 in Petrakis and Kostis, 2015). However, even such unique tight relationships might cause conflict (Kellermans and Eddleston 2004 in Lionzo and Rossignoli, 2013:587) and hinder knowledge integration. This is usually a consequence of the dominant role of family concerning issues of power (Harvey and Evans 1994:345 in Lionzo and Rossignoli, 2013:587). Nevertheless, some family businesses appear to overcome such problems by means of constructive informal network relationships (Arregle et al., 2007, Calabrò and Mussolino

2011 in Lionzo and Rossignoli, 2013:584), in essence another way of saying communities of practice. The latter represents spontaneously formed groups within the firm who voluntarily interact and share knowledge and experiences for the sake of learning (Cross et al., 2001, 2002 in Lionzo and Rossignoli, 2013:588). Research findings (Lionzo and Rossignoli, 2013:600-602) have described communities of practice in small family firms as the most valuable medium for sharing specialized knowledge, from the personal to the organisational level, contributing to strategic renewal, organisational learning and knowledge creation. Put differently, these findings indicate that SMEs, despite their lack of structures, systems and formal procedures, can attain effective knowledge integration by means of communities of practice, established by family and non-family members. This is in contradiction to earlier findings (Granovetter, 1973 in Beamish and Armistead, 2001:109), which claim that communities of practice with 'weak ties' can be in a sense more effective in sharing novel information to members and consequently more contributing to new ideas.

In sum, it is generally accepted that interpersonal trust shapes personal relationships and promotes knowledge sharing. Nevertheless, the size of the organisation (e.g. small family businesses) and issues of power might have their own impact on knowledge sharing. Moreover, the research puzzle becomes more complicated due to the fact that there are contradictory views in terms of the role of communities of practice in SMEs.

The role of culture in Knowledge Management

There is no universal definition of the term culture. In a general sense, culture is how people think, feel and act in a process of learning throughout their life since the commencing of their early childhood (Trompenaars and Hampden-Turner, 1998:24). Similar definitions (Kluchohn, 1951:86 in Hofstede, 2001:9) express the anthropological perspective which emphasises the role of traditional ideas and values of a particular group of people in the context of a historical process. Hofstede (2001:1) defines (national) culture as 'the collective programming of the mind' in terms of values, artefacts and practices including heroes, rituals and symbols. In other words, culture is the interactive sum total of traits that influence people's response to their environment, to the extent that this is distinguishable from other groups of people (ibid:10). Several studies show that values are an important constituent of culture (Krumbholz and Maiden, 2001; Gallivan and Srite, 2005) as they represent a general disposition to prefer specific states of matters

over others. This is a rough approximation of Kluckhohn's (1957/1967) view, who defines a value as '*a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means and ends of actions*' (Kluckhohn, 1957/1967 in Hofstede, 2001: 5). National culture is not the only distinct level of culture; organisational cultures and subcultures still exist. So, for example, Dasgupta and Gupta (2009:209) define culture as the embedded values and beliefs, conscious or subconscious, shared by the members of an organisation. Sunder (2002:182) takes one step further and defines organisational culture as the common knowledge and behavioural expectations of its members. Hofstede (2001:373,391) claims that organisational cultures differentiate mainly in terms of their practices and their '*collective programming of the mind*' rather than their values. The question then is whether it is feasible within the context of a given national culture to have a genuine KM culture that promotes, as Bozbura (2007:210) suggests, team working, eagerness to share knowledge, freedom of opinion and expression, investments in learning, training and working conditions so as to increase employees' capabilities.

With regard to national culture, research evidence (Heier and Borgman, 2002; Chmielecki, 2012), based on Hofstede's four-dimensional cultural model (power distance, uncertainty avoidance, individualism/collectivism and masculinity/femininity), shows a considerable impact of national cultures on KM. According to Heier and Borgman, (2002) the 'power distance dimension' appears as the most relevant in KM systems implementation, for in this context, KM's main objective for knowledge sharing across hierarchies is challenged by both senior executives and subordinates. The former deem the whole process as an attempt to delegate decision-making authority to employees with lower status. The latter find it difficult to adjust to the new demands for successful KM with more reliance on their intellect and motivation, instead of expecting directions and control from their superiors. In contrast, in cultures with low power distance, the implementation of a KM system is more likely to meet less resistance to change, as long as the members of the organisation are familiar with a collaborative work setting (ibid). Previous research (Couto and Vieira, 2004, Kedia et al.,1992, Morris et al., 1994, Nakata and Sivakumar, 1996, Shane, 1992, 1993 in King, 2007:231) showed that national cultures with low power-distance and uncertainty avoidance and high masculinity and individualism are more likely to develop innovative initiatives. Therefore, it is plausible to expect that similar results might be valid in the context of KM (King, 2007:231).

However, this last assertion should be taken with some reservation, for KM is influenced not only by the national culture level but also by the organisational culture level. In addition, the previous combination of the four cultural dimensions represents only one of the sixteen theoretically possible combinations. For instance, it would be difficult to assess the effect of national culture on KM in Greece according to Hofstede's survey. According to this survey, which was conducted twice in 1968 and 1972 among 50 countries worldwide and three regions (Arab countries, East Africa and West Africa), Greece and South Korea shared the 27-28 rank with power distance index (PDI) equal to 60, which is rather a middle position in the scale. The highest power distance index (PDI:104) was measured in Malaysia while the lowest (PDI:11) was measured in Austria (Hofstede, 2001:500). The most impressive is that Greece was the country with the highest score in uncertainty avoidance while the individualism/collectivism dimension and the masculinity/femininity dimension ranked little above the average and little below the average respectively (ibid).Though previous studies (Chmielecki, 2012; Singh, 2006 in Baker and Carson, 2011) found that high uncertainty avoidance discourages knowledge creation and innovation, such findings still remain rough approximations of a complex phenomenon. Moreover, some researchers (Bourantas and Papadakis, 1997) view Hofstede's early findings in 1972 with scepticism, as new studies 15 years later (e.g. Bourantas et al., 1987 in Bourantas and Papadakis, 1997) reveal radical changes in the status of Greek employees. This is congruent with some historical events such as the political stability after the seven-year dictatorship and the European Union entry of Greece in 1981 (ibid).

Furthermore, other researchers (e.g. Magnier-Watanabe and Senoo, 2010) maintain that organisational cultures have stronger influence on KM compared to national cultures. This is due to many reasons and the inherent intimate relationship between KM and organisational culture. For instance, the latter is widely recognised as a dominant factor concerning the promotion of knowledge sharing, knowledge creation and learning (Gupta, Lakshmi and Aronson, 2000 in Evans and McKinley, 2010:1075), all of which are inextricably constituent elements of KM. Many researchers (e.g. Gan, Ryan and Gururajan, 2006) argue that a culture which consists of collaboration instead of competitiveness, mutual trust, leadership as a driver, organisational learning capabilities and incentives/rewards has a positive impact on KM development and practices. From this perspective, a certain kind of organisational culture seems to be prerequisite for KM

initiatives. Hence, without the appropriate organisational culture, (e.g. see Table 2.3 by Chmielewska-Muciek and Sitko-Lutek, 2013) which entails at least mutual trust and genuine collaboration, KM initiatives are more likely to fail (De Tienne et al., 2004). From another perspective, KM can be a 'tool' as the enabler for change and the facilitator to create the desired organisational culture (Jennex, 2007:6). Rightly, then, Alavi and Leidner (2001:126) pose the dilemma: cultural change first and KM afterwards or KM processes have the potential to promote cultural change? Whatever the answer is to this dilemma, there are researchers (e.g. Leidner, Alavi, and Kayworth, 2006) who maintain that cultural change is more likely to occur as KM becomes embedded in culture.

Table 2.3	
Organisational Culture Supportive to Knowledge Management	
Organisational values	**Characteristics of Organisational Culture supportive to KM**
Low power distance	-Open relations between subordinates and superiors -Fluidity of roles and job description -Participatory management -Managers encouraging dialogue, informal ways of communication, communication skills, knowledge share, learning and creativity -Transparency and unlimited accessibility to sources of information and knowledge
Focus on people	-Participatory management in decision making -Promotes self-actualisation -Collective responsibility -Trust and mutual care in the relationships between employees and organisation -Increasing autonomy of knowledge employees -Active participation in the organisation's problems by providing employees with time, resources and conditions in order to find solutions
Collectivism	-Team working and co-operation
Pro-innovation	-Constructive approach to dealing with different opinions, contradictions, conflicts and inequalities in terms of qualifications and skills. Such issues form the basis for deliberation and a chance to deepen knowledge -Learning is mandatory and learning from mistakes is natural -Acceptance of diversity of actions and chosen methods of working -Productive and full use of possessed information and knowledge -High professional competences of employees are highly valued and their training is treated as an investment which in turn enhances their self-confidence -Encouraging intellectual flexibility, creativity and openness to new ideas

High tolerance of uncertainty	-Readiness and courage to immerse oneself in a fluid environment by participating actively in the processes of change, fact which presupposes intellectual flexibility and the right to make mistakes -Changes are considered a source of inspiration and development of opportunities -Openness in all levels in terms of changes and changeability of environment, openness to others and diversity promotes thought exchange and innovation
External orientation	-Emphasis on customer's satisfaction by expanding the knowledge about current and prospective customers
Status based on achievements	-Employees place a high value on specific knowledge, working capabilities, perfection, professionalism which in turn pays off in self-esteem and professional aspirations
Openness to environment	-Co-operation within and outside the organisation by creating networks of knowledge creation

Adapted from Chmielewska-Muciek and Sitko-Lutek, (2013)

Some research evidence supports the suggestion that organisational culture can be the primary cause of success (Janz and Prasamphanich, 2003 in King, 2008:36; Lindner and Wald, 2011), or at least one of the key factors of successful KM (Davenport and Prusak, 1998; Davenport, Long and Beers, 1998; Martin, 2000). However, King (2008) questions whether culture is always a critical antecedent of KM success. Additionally, Firestone (2001) questions what he sees as the overemphasis of culture's role in KM. Sometimes the so-called cultural barriers are actually attributable to something else. This is mainly because of the loose conception and use of the concept culture (ibid). Other researchers identify inappropriate organisational culture as one of the most important causes of failure of KM initiatives (Lam, 2005, Pauleen and Mason, 2002 in Hislop, 2009:146-147; Pillania, 2006) or perhaps the most considerable barrier to effective KM (Gold, Malhotra and Segars, 2001:189; McDermott and O'Dell, 2001 in Kalkan, 2008:394). Inappropriate organisational cultures are generally described as cultures that lack the KM orientation outlined in Table 2.3. Research evidence suggests that in some cases organisational cultures remain 'inappropriate organisational cultures' pertaining to KM, for they fail to

remove the influence of KM barriers (e.g. power distance, competitiveness associated with the adage 'knowledge is power' implying knowledge hoarding) deriving from their national culture (e.g. 'Cultural barriers of KM - a case of Poland', Chmielecki, 2012; 'Chinese cultural influences on KM practice', Tong and Mitra, 2009).

In sum, research evidence shows that human and socio-cultural aspects are key causes of the success or the failure of KM implementation (Hislop, 2009:146). Such aspects include interpersonal relationships, interpersonal trust, group identity, national cultures, organisational cultures and sub-cultures. Nevertheless, there is little research evidence specifically within the particular context of SMEs pertaining to how socio-cultural factors affect knowledge sharing and KM (Durst and Edvardsson, 2012:897). More research is needed in order to shape a clearer picture in the relationship between organisational culture and KM processes (Saifi, 2015:182).

2.6.3 The Political Dimension

Most researchers agree that there is no consensus on a universal usage of the concept of 'power' (Krause and Kearney, 2006). The controversial term 'power' can have two possible interesting meanings in the context of management. The first meaning denotes control over people viz sovereignty and the second implies 'beginning', principle or initiative. Such an approach is based on the Greek etymology of the word 'power' (αρχή-archè see Greek-English Lexicon, Liddell and Scott, 1996:2521). In one sense, power denotes the capacity to influence, to restrain or even to penalise (Oppenheim, 1961 in Walter, 1964:3511). Under this vein, power denotes the potential effect that one person exhibits over another (Weber, 1947, Emerson, 1962, Pfeffer ,1992 in Martinez et al., 2012:1). From a different point of view, power and control in their positive sense denote will, initiative and consistency respectively, which implies political maturity. In that sense, power acts as a facilitator that enables the accomplishment of certain goals, that is, 'the power to' (Clegg et al., 2006, Parsons, 1967, Stewart, 2001, Wrong, 1979, in Collin et al., 2011:304). VeneKlasen and Miller (2007) suggest another positive distinction of power expression, namely, 'power with' which is in essence a 'power to' expression based on joint action and collaboration. The 'power with' expression based on mutual support enables the reconciliation of different interests, mediates social conflicts, promotes equitable relations and multiplies individual talents and knowledge (ibid).

How people in organisations perceive power is critical for KM. One of the most often-cited barriers to KM is knowledge hoarding which is associated with the belief that knowledge is power. Politis (2005) poses the question whether we can ignore this adage. Likewise, Ryan and Shinnick (2011) argue that it is often difficult to motivate people to share their knowledge, although other researchers have explored the ways in which such sharing can indeed be stimulated. For instance, employees may share their knowledge when there is an expectation of recognition or some kind of reward from their employer (Cabrer and Cabrera, 2002 in Ryan and Shinnick 2011). Second, people often share knowledge for the sake of sociability and 'noble' feelings of 'doing the appropriate thing' (Wasko and Faraj 2000 in Ryan and Shinnick 2011). Others may simply see knowledge sharing as a matter of reciprocity and mutual benefit (Wasko and Faraj, 2000 in Ryan and Shinnick 2011). In other words, this is the 'golden rule'; one shares their knowledge, for they expect that their colleagues will do the same in another case. However, without the right environment in the organisation, say a highly competitive one (Schultze, 1999 in Land, Amjad and Nolas, 2011:475), such instances do not conform to a rule but rather to exceptions (Ryan and Shinnick, 2011). The paradox is that, unlike the traditional factors of production (land, labour and capital), knowledge expands by sharing it, yet there are significant challenges in convincing people to share knowledge (ibid). As a result, some authors (Cuel, Bouquet and Bonifacio, 2011) advocate that people's power should be the result of sharing knowledge rather than the result of owning it.

Yet, researchers such as Sussman et al., (2002) contend that one cannot ignore power when investigating KM, for organisations by definition as political systems exert power, influence and sometimes dishonest methods to achieve their goals. This view implies an aggressive view of organisations in contrast to Beijerse (2000) who defines an organisation merely as a group of people who voluntarily collaborate to mutually achieve certain goals. Following this view, researchers have asked whether organisations can create cultures which equate power with knowledge sharing as Politis (2005) urges. For, if knowledge is so precious a positional resource, how, if at all, can anyone be motivated to share it? (Davenport 1998 in Hase, Sankaran and Davies, 2006:36). Famously adopting a more dynamic, situated view of power, Foucault considers knowledge and power inseparable and inherently intertwined (Foucault, 1980 in Hislop, 2009). In accordance with this view, Pettigrew (1976:26 in Land Amjad and Nolas, 2011:721) claims that power is nothing but an attribute of social relationships and not a quality of the actor.

Power is a matter of exercise rather than a matter of possession (Foucault, 1977a:26 in Marshall and Rollinson, 2002:11). Such a view is in direct contradiction with positions which recognise the personal nature or dimension of power. How people perceive power depends on their ontological, anthropological and epistemological assumptions.

However, Foucault is not without detractors. For instance, Taylor (1984) criticised him for failing to explain how knowledge/power conceptualisation really works in practice. Likewise, Hardy and Clegg (1996 in Marshall and Rollinson, 2002) maintain that the Foucauldian perspective on organisation theory, based on the nexus of power/knowledge, remains at a high abstract theoretical level without considering practical concerns. On the other hand, defenders of the Foucauldian perspective (McFarlane, 2006a, Powell, 2006, Rossi, 2004 in Ferguson, Huysman and Soekijad, 2010:1799) maintain that KM is more than sharing knowledge and knowledge storage. KM is also about the conscious screening of knowledge in order to marginalise and dispel what is not relevant or legitimate (Gherardi and Nicolini, 2002 in Ferguson, Huysman and Soekijad, 2010:1799), and therefore power relations arise out of negotiations concerning the relevance and irrelevance of specific knowledge assertions. Given the previous discussions in this section, we might ask how this is relevant to small organisations where the owner-manager plays a central role in decision-making.

From a different perspective that focuses more on the employer/employee structural relationship, some researchers (Gray, 2001) contend that the introduction of technology is not without effects on employees pertaining to power and control issues. The critics of KM claim that managers, under the guise of KM rhetoric, can choose the potentialities of information technology (IT) to reduce the power of employees by downgrading the level of practical knowledge (skills) required in job descriptions, a process known as 'de-skilling' (Zuboff, 1988 in Gray 2001:371). IT can be used as a means to strengthen managerial power by monitoring employees' performance, or alternatively as a way to empower and enhance employees, that is, up-skilling (ibid). The first option implies a strategy and culture of compliance, whereas the second implies one of commitment (Walton, 1989 in Gray, 2001:372).

According to Davenport (1993) these cultures of control and empowerment are two sides of the same coin, for both promote managerial control (Davenport, 1993 in Gray,

2001:372). Gray (2001) argues that those employees who are simply users of KM systems are more likely to feel the threat of losing their power position over time. In contrast, employees who have an active contributing role in KM systems experience the opposite effect. In the case of Knowledge repositories (i.e. management systems emphasising storing knowledge) sometimes employees' contributions remain unidentified without social exchange benefits between the provider and the seeker. This is thought to undermine face-to-face sharing and as a result it is not unusual for employees to sometimes be reluctant to contribute to KM systems (Gray, 2001:370).

In sum, knowledge repositories can be a means to enhance managers' power at the expense of employees. This is possible in two ways. First, use of knowledge repositories can potentially lead to discounts in employee uniqueness. Second, use of knowledge repositories might be the cause of downgrading of analytical skill demanded in a job. Whether these two propositions are likely to occur, to some extent depends on the choice of control method selected by the organisation's management strategy (Gray, 2001). From the managerial perspective, Newstrom and Davis (1997 in Politis, 2005) verify that generally the exercise of coercive power, that is, manager's 'vantage point' to punish and bully, has a negative impact on employees' willingness to share their knowledge and experiences. In the same vein, 'legitimate power', that is, the managers' authority to exert control over subordinates has a mainly neutral effect, whereas referent power, that is, managers' personality power to develop followers is more likely to bring about negative results. In contrast, managers' credibility and expert power (viz employees envisage managers providing their knowledge) appear to have a significant positive impact on knowledge acquisition/creation and knowledge sharing (Politis, 2005). These four resources, or bases of power, originate from French and Raven's (1959 in Politis, 2005) five power-based taxonomy. In Politis' (2005) study the fifth power resource, namely 'reward', which is associated with managers' ability to provide rewards, seems to support no significant positive relationship with knowledge acquisition attributes.

In a subsequent study, Jayasingam, Ansari and Jantan (2010) verify Politis' (2005) findings concerning expert power and referent power. In addition, they find a moderate impact of organisational size upon three out of five of French and Raven's power bases. In small organisations, coercive, legitimate and reward power seem to be more influential in contrast to larger organisations. In fact, the impact of coercive and legitimate power is

more adverse and detrimental in small firms. Conversely, top managers' reward power is associated with a positive relationship on knowledge dissemination in smaller organisations.

Nevertheless, French and Raven's taxonomy and other taxonomies (e.g. Raven, 1965, Raven, 1992, Raven et al., 1998 in Krause and Kearney, 2006:15) are not without critiques. First there are problems of generalisation, for some taxonomies prove to be inappropriate for some contexts. Second, it is unfeasible to demarcate the different power resources (Podsakoff and Schriesheim, 1985 in Krause and Kearney, 2006). Third, there are no convincing criteria for selecting the particular power resources and not others. Last but not least, even a sufficient group of power bases for a specific context confronts serious limitations in terms of the operationalisation of its constructs (Krause and Kearney, 2006).

In conclusion, power is a critical, controversial term in the context of KM. The negative aspect of power is associated with knowledge hoarding and the adage 'knowledge is power'. In this sense, power most often denotes control and influence over people. The positive aspect of power implies will and initiative. In that sense, power is a mover and enabler. As aforementioned, though some researchers (e.g. Foucault, 1980 in Hislop, 2009) consider knowledge and power as two inseparable, intertwined concepts that take place in everyday human acts and relationships, critics have argued that there is little convincing evidence regarding how this really works in practice within organisations. However, research evidence in KM reveals that there are instances where both personal (subjective) and social dimensions within organisation can shape power stances and behaviours towards knowledge sharing. In other words, it is not clear how people in organisations equilibrate their power behaviour between subjective interests and socio-cultural demands. Moreover, how people conceive power depends on their general view of the world, the organisation and KM itself and vice versa; how people view KM to some extent depends on how they experience issues of power within organisations. This is of particular interest in SMEs and family business where the owner-manager as the central actor of the organisation has to balance power relations between family members and non-family members.

2.7 Knowledge Management in SMEs

2.7.1 The peculiarities of SMEs

In general SMEs have some characteristic differences in comparison with large organisations. The following table 2.4 summarises some of the most cited differences in the KM literature.

	Table 2.4	
S/N	Differences between SMEs and Larger Enterprises	References
1	SMEs appear less advanced in scientific and social construction of knowledge, dealing the latter with a mechanistic way, less dependent on social interaction, along with a lower level of capital investment in KM approaches and systems.	McAdam and Reid, 2001
2	Mostly large organisations develop formal management information systems whereas small organisations neglect to incorporate formal systems for a variety of reasons, including: lack of understanding in terms of the processes engagement and the varied types of knowledge in a complex environment, limited budgets, shortage of long-term personnel, high employee turnover, ignorance of the potential benefits of the appropriate KM system	Nunes et al., 2006 in Lee and Lan, 2009
3	Most small organisations practise informal KM, that is, without labelling it as such, without initiatives such as strategies, policies, action plans, projects guided by the concepts and terminology of KM, though there are signs that more and more SMEs adopt formal KM approaches.	Hutchinson and Quintas, 2008
4	KM in small organisations usually revolves around the owner-manager who is the central driver for decision making, KM implementation and in most cases, is overloaded with responsibilities of every aspect and limited time to focus on KM strategic issues.	Rasheed, 2005
5	SMEs are less bureaucratic, with a flatter and simple structure that facilitates change initiatives, for functional	Wong and Aspinwall, 2004 in Rasheed, 2005

	integration occurs more easily in both directions horizontally and vertically with fewer complications.	
6	SMEs are more likely to have a more organic and fluid culture compared to larger organisations, which makes it easier to change the culture, for example in ways that promote knowledge-sharing activities.	Ghobadian and Gallear, 1997; Lesser and Prusak, 1999 in Rasheed, 2005
7	The fact that in small organisations the culture is shaped mainly by the owner means that this person has a more profound and direct impact – either positively or negatively – upon KM within the firm than does the manager in a larger, more bureaucratic organisation.	Rasheed, 2005
8	SMEs tend to accommodate an environment that holds a higher potential for the generation of knowledge due to closer social relationships between the employees which promote effective communication and knowledge sharing	Riege, 2005
9	SMEs are generally less capable of attracting or retaining highly qualified and experienced employees, mainly due to their more restricted resources, which in turn constrain their ability to offer high wages and / or bonuses. Some employees see SMEs as a stepping-stone to their preferred career prospect before leaving to join a larger organisation.	Rasheed, 2005
10	SMEs are often associated with the loss of key employees to a higher degree than larger organisations.	Handzic, 2006
11	SMEs seem to be more prepared to learn and tend to demonstrate a more dynamic and agile attitude than larger firms.	Handzic, 2006

As the Table 2.4 above illustrates, evidence suggests (Sparrow, 2011) that SMEs, appear generally to demonstrate a different KM context from that of larger organisations. In some ways, this context supports effective KM (e.g. closer working relationships between employees), and in others it inhibits it (e.g. fewer resources to invest in KM systems and

mechanisms). That is not to say SMEs represent a homogenous category of business organisations. For example, research findings (Sparrow, 2011) reveal that different SMEs have distinct qualities in terms of their environment capabilities and orientations. In particular, Sparrow refers to growth-oriented and growth-averse SMEs. The former are more apt to develop KM initiatives (Sparrow, 2011). Additionally, growth-oriented SMEs are more likely to have greater knowledge assimilation-absorptive capacity (Gray, 2006 in Sparrow, 2011) as well as an aggressive-prospector strategy (Liao et al., 2003 in Sparrow, 2011) than the latter. Likewise, Krogh, Ichijo and Nonaka (2000 in Handzic, 2006:7) discern three broad categories of organisations (either small or large) in terms of how they align KM with their business strategy. Risk minimisers focus on locating and capturing valuable knowledge within company. Efficiency seekers implement initiatives through sharing practices so as to maximise the use of existing knowledge. Innovators seek new knowledge and processes as a means to creativity and innovations. In the same vein, Nunes et al., (2006 in Sparrow, 2011) points out the differentiation among SMEs with reference to knowledge-intensive versus labour/capital-intensive distinction. The former refers to organisations in which knowledge outweighs other inputs, and therefore human capital is the most valuable asset in comparison with physical or financial capital (Starbuck, 1992 in Swart and Kinnie, 2003:61). Other researchers (Caniëls and Romijn, 2005, Simmie and Strambach, 2006, Strambach, 2008 in Millar, Lockett and Mahon, 2016:846) equate knowledge-intensive firms with organisations whose activities are chiefly dependent on KM.

In a similar vein, Wong and Aspinwall (2004) classify six basic categories in terms of the characteristics of small firms, namely i) ownership and management, ii) structure, iii) culture and behaviour iv) systems, processes and procedures, v) human resources and vi) customer and market. All those characteristics bring about both advantages and disadvantages pertaining to KM implementation. Nonetheless, many researchers agree that the most acute problems, characteristic of most small firms, are intertwined with lack of resources (financial and human) and time (Wong and Aspinwall, 2004).

Likewise, Desouza and Awazu (2006) reveal five key peculiarities that often affect KM in SMEs. For example, the owner-manager in SMEs usually plays the role of the knowledge repository. Intranets or large data bases are rather rare for sharing explicit knowledge. The socialisation process chiefly begins from the manager to employees and

not vice versa. Hence, the synthesis of explicit knowledge (Combination of the SECI model, see page 20) occurs privately. The members of the organisation are in close contact with one another and with their owner-manager. Although the decision process remains the locus of the owner-manager, the members of the organisation demonstrate direct organisation-wide interaction, trust and communication (Sparrow, 2011). Put differently, the process of socialization prevails over the other processes of the SECI model. Similarly, McAdam and Reid (2001:235) verify that knowledge in SMEs is systematically captured primarily at senior management level and secondarily at middle management level. Moreover, their research reveals that SMEs paradoxically rely less on social interaction compared to larger organisations, and they appear less dependent on people-based knowledge embodiment (e.g. formal discussions). The researchers attribute these findings to the fact that SMEs are lacking time and resources (ibid).

The second peculiarity, according to Desouza and Awazu (2006), which in fact one might take as a natural consequence of the first, is 'common knowledge', that is, knowledge taken for granted by all members of the organisation. This knowledge is deep and broad, facilitates sense-making and has a positive impact on knowledge transfer and application. Desouza and Awazu find this to be more prominent in small firms compared to their larger counterparts.

The third peculiarity, according to Desouza and Awazu (2006) refers to knowledge loss. SMEs on the whole appear to deal comparatively effectively with knowledge loss, mainly because the owner-manager holds the core knowledge of the organisation and all employees are more likely to be bearers of common knowledge (ibid). This issue, according to Wong (2005), is critical in SMEs and deserves more attention.

Many researchers (Finn and Phillips, 2002; Wickert and Herschel, 2001; Wong and Aspinwall, 2004; Wong and Radcliffe, 2000) seem to be less optimistic than Desouza and Awazu (2006) in terms of how SMEs deal with the problem of knowledge loss. According to some researchers (e.g. Finn and Phillips, 2002; Wong, 2005) this is because employees in SMEs are naturally looking forward to improving their career prospects in larger organisations. Moreover, additional threats to family-owned SMEs relate to succession problems in cases where the owner quits or passes away (Bracci and Vagnoni, 2011; Wickert and Herschel, 2001:330). In this sense, family-owned and run businesses are

often defined as a distinct category of SMEs. Understanding small family succession through the lens of a KM perspective might be a vital issue for the survival of small family businesses (Bracci and Vagnoni, 2011). Due to the fact that small organisations tend to face heightened financial constraints and rarely display a systematic approach to KM, the development of proactive measures to tackle the problem of knowledge loss remains precariously in suspense (Durst and Wilhelm, 2012).

In terms of the fourth peculiarity, it is argued (Desouza and Awazu, 2006) that SMEs are more able to turn their disadvantage of limited resources into an advantage by exploiting ready-made external knowledge. This external orientation is facilitated by their characteristically closer ties with their localities and the exploitation of the environmental knowledge.

With regard to the fifth and final peculiarity, some evidence suggests (Desouza and Awazu, 2006) that SMEs are more likely to apply people-centred KM. People-based methods including face-to-face meetings, observations and apprenticeship among others are relatively common modes of KM, creation and transfer within SMEs. The emphasis upon technology as the means to manage knowledge, said to be the focus in large firms, is much less common in small firms. Knowledge that appears to grow more organically in the small firm takes an active immediate role in practice and institutionalises as part of everyday conversation (ibid). In addition, Sparrow (2011) observes that small firms are more likely to have fewer technological requirements and consequently a limited scope of technical expertise associated with high sophisticated practices overall.

In sum, the available evidence suggests that SMEs practise KM differently in comparison with large organisations. As noted above, that is not to say that SMEs are an entirely homogeneous category, for they differentiate significantly in terms of their size (micro 1-9 employees and medium 50-249 employees) and strategic and internal qualities (e.g. growth-oriented or growth-averse). However, there do seem to be some widely-cited commonalities in the ways that SMEs manage knowledge as distinct from larger firms. In summarising these characteristics, Sparrow (2011) maintains that the main differentiation between SMEs and larger organisations is that KM for the former is about personalisation (instead of codification) and strategic management of knowledge and capability (instead of operational advancement). The personalisation strategy emphasises

dialogue among the members of the organisation instead of knowledge constructs in databases. Personalisation is a person-to-person approach which encourages both face-to-face and electronic knowledge sharing (Cendan et al, 2007 in Hussain and Ahmed, 2010:5). In general terms, therefore, research evidence (Earl, 2003, Holm and Poulfelt, 2003 in Hutchinson and Quintas, 2008:135) suggests that SMEs are more likely to use informal KM rather than formal KM processes. This distinction is the theme of the next paragraph.

2.7.2. Formal or informal Knowledge Management and management practices in Greece

Hutchinson and Quintas (2008:133) define informal KM processes as those processes without reference to the concepts or terminology of KM. Conversely, formal KM processes refer to practices, policies, initiatives, structures, plans and so on, which become understandable by those using KM language, concepts and terminology. That is not to say that small organisations do not have practices to manage knowledge. In fact, as Skyrme, (2002 in Hutchinson and Quintas (2008:135) puts it, small businesses do practise KM, but it is often not recognised as such. Similar results derive from case studies conducted by Beijerse (2000). A significant portion of the participants acknowledges that, though they use KM, they do not call it KM. SMEs in general lack an explicit understanding of KM, chiefly in terms of basic concepts (Wong and Apinwall, 2004) and processes (Lim and Klobas 2000 in Wong, 2005:266) and that might explain the fact that formal and systematic KM practices do not appear, in most of them, as a priority in their agendas.

Becker, Jorgensen and Bish (2015) following Hutchinson and Quintas (2008) and Durst and Edvardsson (2012), argue that little research has been focused on the knowledge identification process, despite its critical role in detecting the necessary knowledge for the organisation's success. They examined specifically how SMEs understand and practise knowledge identification and acquisition. Their findings suggest that, although SMEs approach knowledge identification and acquisition processes mainly in an informal way, this informality might be apparently taken as ad hoc or even inadequate at first reading. The authors argue that the cases they studied with SMEs demonstrated an approach analogous to the emergent strategy model of Mintzberg and Waters' (1985), which is recognised as a way of responding strategically in unstable conditions. In other

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words, SMEs engage in these activities deliberately and strategically opposed to the conventional assumption that managerial choices require formality in order to be recognised as strategic. Hence, the deliberate informal application of these two core KM processes, by adopting an emergent approach, demonstrates a level of organisational proactivity and flexibility as an antidote to internal or external changeable conditions (ibid).

In a recent study, Bolisani, Scarso and Zieba, (2015) showed that another type of an 'emergent KM approach' in SMEs still exists. While this approach in the first stages bears the characteristic of an informal KM approach, in the process, the KM practices that have emerged from actual needs acquire recognition, formality and validation (ibid). Though Bolisani et al.'s (2015) emergent approach in the examined cases assumes some characteristics congruent with SMEs peculiarities such as flexibility and low-cost investments in KM, it also assumes a bottom-up approach, that is, the KM solutions are developed by employees and then accepted by the top management/owner. This raises issues of potential contradiction with previous views arguing for the central authoritarian role of the owner-manager. In any case, the consequence of this technical distinction, formal versus informal KM, is that a complete study of how organisations (particularly small organisations) manage knowledge must take into account all kinds of potential KM processes, whether formal or informal.

Furthermore, research in small business (Mukhtar, 2002) notes that the size of the firm and the owner-manager's gender influence the relative use of formal and informal management practices. Research findings (Roberts et al., 1992: 255 in Wilkinson, 1999:210) note that in firms with more than 20 employees, informal management practices become problematic. This aligns with the contention (Beaver and Jennings, 2005:11; Loan-Clarke et al., 1999:305) that above a specific size the owner-manager reaches a ceiling where the highly personalised and informal approach to management can no longer be sustained, and the firm needs professional management and delegation. The role of the owner-manager is therefore crucial and is expanded upon below; and the specificities of the Greek context are also introduced.

Bourantas and Papadakis (1997) in their study of Greek private enterprises, public organisations and multinational enterprises in Greece, reveal that there is a gap between

the preferred and the dominant management culture. Their findings suggest, for example, that managers in Greek firms show a strong preference for the 'task culture' which recognises expertise as the principal element of power and influence. However, Bourantas and Papadakis believe that there are actually two dominant management cultures, the 'club culture' and the 'role culture'. The former is associated with the power-centred patriarchical model and is generally founded on the essentially benevolent power of a charismatic manager-owner. This type of culture mostly characterises small firms according to Bourantas and Papadakis. On the other hand, the 'role culture' favours the role instead of the personality. In a role culture-oriented organisation, functions and divisions secure order, rules and duties, so that people are parts of the system in a rather undetermined free manner. As far as the leadership style is concerned (Bourantas 1988 in Bourantas and Papadakis, 1997) employees across all types of organisation mainly prefer the consultative style at 62.6 per cent, followed by participative style at 24.6 per cent. The less preferred style is the autocratic at 1.8 per cent, whereas the persuasive style represents a small part of the sample, that is, less than 12 per cent. However, the statistics show that the employees (respondents) perceive that, although the consultative style dominates at 40.2 per cent, the autocratic style and the persuasive style account for 24.5 per cent and 22 per cent of cases respectively, whereas the participative represents the least percentage of 13.3 per cent. More recently, Psychogios (2011) maintains that Greek organisations are recognisable from their autocratic style of leadership which is founded on a culture that is primarily emotional and secondarily rational. The Greek management style, through the lens of this emotional culture, has been associated with less rational processes, less rationality in strategic decision making, less use of internal co-ordination systems and less rule formalisation (Bourantas and Papadakis, 1997:22).

The emotional character of SMEs has also been connected with family business (Siakas et al., 2014). Family businesses sometimes differentiate from other companies as they have two dynamic conflicting manifestations, the family which is the emotional side and the company which is the professional side (ibid). For instance, such conflicts arise when a parent hires an incompetent family member or treats competent and professional family members as if they were still kids (ibid). Hence, it is plausible for one to expect that informal KM is more likely to be the case in SMEs. Likewise, Prouska and Kapsali (2011:267) claim that the prevailing style of management in micro enterprises is paternalistic-idiosyncratic and controlling, conditioned by informal interaction, yet with

considerable power asymmetry. Paradoxically, these results do not confirm previous findings (e.g. Spanos, Prastacos, and Papadakis, 2001) that there are clear indications that SMEs gradually leave behind the authoritarian and paternalistic management style which is associated with many of their founder-owners.

In a diagnostic summary of Greek management styles, Bourantas and Papadakis (1997) conclude that such styles, though essentially in accordance with Western paradigms, fall behind in terms of modernisation and the application of scientific methods, management techniques, systems and functions, and specialised knowledge and skills, which all support professionalism and decision-making. That is not to say the Greek management entails a different or distinct model compared to other European countries, but it is rather a matter of maturity concerning development (ibid). This underdevelopment of management is mainly attributed to the dominance of small firms and family status (Georgas, 1993 in Bourantas and Papadakis, 1997) and their incapacity, due to economic constraints, to recruit and reward high-quality professional managers (Papadakis, 1993 in Bourantas and Papadakis, 1997). Other, historical reasons, such as the fact that the historical periods of the Renaissance and the industrial revolution find Greece under occupation of foreign powers, might also explain this underdevelopment of management. In fact, the appearance of western management concepts in Greece only occurred after the full liberation of Greece in 1944 (ibid). Similarly, other researchers attribute this managerial gap also to the fact that modern management, as both art and science, is a relatively recent item in the Greek business sector (Psychogios and Szamosi, 2007 in Psychogios, 2011:216) and to the scant development of HRM practices in Greek firms (Vouzas, 2004 in Psychogios, 2011). Nevertheless, there is a trend that management practices are in a process of change due to a critical mass of new generation of managers and personnel who have acquired management capabilities and are aware of new management methods through their studies, or/and by working abroad, or by working in multinational companies (Prouska and Kapsali, 2011).

To conclude this section, KM in SMEs seems to be a more complex issue, for in many cases is taking place without explicit plans and formal systematic procedures. The central role of the founder-owner, and in most cases managing director of SMEs, is decisive for the management practices in the organisation. Though there is a generally accepted view that there is a new educated generation who is prepared to support new management

methods imported from the USA and EU, and KM is one of them, there is little experience as to how they fit into Greek reality. As Prouska and Kapsali (2011) maintain, Greek management practices are leading a phase of transition, and therefore, a consequent confusion inevitably accompanies this period.

2.7.3 SMEs in the Greek context

SMEs dominate the Greek economy accounting for 99.9 per cent of all enterprises, 75 per cent of added value and 87 per cent of employment (EC, 2016:2). These proportions are significantly larger compared to the average EU-28 figures of 99.8 per cent, 57 per cent and 67 per cent respectively (ibid:2). It is also noteworthy that the Greek SME sector is characterised by a higher proportion of micro firms than all other EU-28 countries (EC, 2013:2). The contribution of micro enterprises in the SME sector accounts for about 48 per cent of the added value and 68 per cent of all workplaces (EC, 2016:2). Moreover, the Greeks highly value self-employment. Despite the economic crisis, the Greeks consider self-employment and entrepreneurship a desirable career prospect. Compared to the EU average, Greeks are 200 per cent as likely as other European citizens to end up self-employed (EC, 2014:8).

Nevertheless, SMEs bear the brunt of the eight years of continued economic crisis. According to OECD (2009), SMEs are generally more vulnerable in times of crisis, as they have limited alternatives and more constraints. The small number of employees makes downsizing difficult, while monolithic economic activities, credit dependence and fewer financing chances also make it harder for small firms to survive. As a consequence of the economic crisis in Greece, the number of SMEs between 2008 and 2011 decreased dramatically by 90.000 units (EC, 2012). Between 2008 and 2013 almost one fourth of the SMEs that existed in 2008 shut down (EC, 2014). Although the downward trend slows down in 2013, the recession has turned into stagnation, and the current forecasts suggest no major reversal (EC, 2016). In essence, the added value of SMEs since 2013 has remained almost unchanged, which stands around 35 percentage units below the base year 2008, and this is projected to be continued in the year 2017 (ibid).

Recent studies (Siakas et al., 2014; Vlachakis, Chatziboulidis and Belidis, 2011) show that family businesses demonstrate greater resistance to the impact of economic crisis, due to family ties and in-built mechanisms that operate more effectively compared to non-

family businesses. Such mechanisms are associated with the emotional character of the company, a strong sense of responsibility to protect family property, name and legacy and the family members' willingness to work long days under uncomfortable conditions, and often with inconsistent low rates of remuneration. Some family businesses perceive the economic crisis as a 'forced' opportunity for operational changes and re-organisation by urging the owners to adopt lean and flexible budgets and more formal management practices for decision-making (Vlachakis, Chatziboulidis and Belidis, 2011).

Despite the signs of improvement in terms of the economic crisis, SMEs still face severe financing problems compared to other countries (Wehinger, 2013). In practical terms, banks reject 34 per cent of entrepreneurs' loan applications, that is 20 percentage units higher than the EU average (EC, 2014). Greece among the EU member states records the highest rate of unemployment, 26.5 per cent in 2014, that is 16.3 percentage units higher than the EU-28 average (Eurostat, 2017). Even though the unemployment rate dropped slightly to 23.6 per cent in 2016, that is 15.1 percentage units higher than the EU-28 average, Greece still records the highest rate (ibid). Greek admission to the Eurozone exposes a gap between labour cost and labour productivity. The former grows faster than the latter, especially when compared with Germany, though during the crisis this gap to some extent shrinks (OECD, 2014:12). Macro-economically among the OECD countries by the end of 2014 the OECD projected only one country with a negative real GDP growth: Greece. In the same period, OECD tables rank Greece as the country with the lowest rate of employment and the highest rate of unemployment. Greece is one of the seven OECD countries with the lower performance pertaining to the three main dimensions of job quality with regard to earnings quality, labour market security and quality of the working environment (ibid: 81). Greece ranks second behind Mexico with the highest average annual hours actually worked per person in employment (ibid: 282).

In general, research evidence suggests that SMEs are a vital contributing factor of inventions and innovations (Kitching and Blackburn, 1999 in Bozbura, 2007:209; OECD, 1995 in Hyz, 2011:162), yet how is this finding generalisable in the Greek context? Recent findings (Markatou, 2012) do indeed suggest that the SMEs sector in Greece is the main contributor in the production of innovation. More specifically, very small and small firms, with fewer than 50 employees appear, to be the dominant innovators. Markatou (2012) measures innovation based on patent data which are regular innovation

indicators in the operationalisation process (Grupp, 1990, Archibugi and Planta 1992 in Markatou, 2012). Despite the difficulties of measuring innovation and the limitations of this study (Markatou, 2012) there are some noteworthy observations. The fast growth branches which represent the 49 per cent of firms account for more than 50 per cent of patents. This percentage is concentrated in only four manufacturing branches, to wit fabricated metal products, machinery and equipment, chemical products, and rubber and plastic products, which are recognised as medium-low and low technology branches. The medium growth branches represent the 28 per cent of firms and the 31.3 per cent of patents. What is left for the declining branches, the 5.6 per cent of firms, accounts only for 4.78 per cent of patents (Markatou, 2012).

A contradictory study from the OECD (2010) shows that SMEs in Greece are actually less innovative, as a percentage of all firms within size category, than large organisations. However, this study operationalises innovation differently (not in patents but in four types of innovation) and only takes into account firms with more than 20 employees and therefore entirely excludes micro firms (see OECD, 2010: 47,67) with less than 10 employees which is the great bulk of all firms in Greece (viz 96.8 per cent of the total, see EC, 2016:2).

In sum, the profile of SMEs in Greece is characterised by high proportions of micro enterprises and high rates of self-employment compared to the other EU countries. SMEs operate in adverse financial constraints within a country ranking the highest unemployment rate in Europe. However, though the Greek workers record the second longest working hours annually, there is a gap between labour cost and productivity. Moreover, there are indications that some branches of small firms appear to be the dominant innovators. Despite the fact that many researchers link KM positively with innovation performance (Argote et al., 2003, Darroch and McNaughton, 2002, Huang and Li, 2009, Lin and Lee, 2005, Plessis, 2007 in Kör and Maden, 2013) there is little research how KM oriented are those firms and how subjective, social and political dimensions influence KM particularly in SMEs. Last but not least, family businesses deserve our particular attention, for they appear to be a distinct category of SMEs showing a remarkable resistance in times of economic crisis.

2.7.4 Knowledge management in the period of economic crisis

Several studies (Mehta, Mehta and Sharma, 2011; Shaw et al., 2007; Wang, 2009) show the importance of KM in times of economic crisis. In a period of economic recession, where ambiguity and unpredictability prevail (Mehta, Mehta and Sharma, 2011), knowledge and knowledge sharing are often described as the most critical factors of organisational capacity in order to increase competitiveness (Tomka, 2009 in Fodor and Poór, 2009). However, there is no strong research evidence (Fodor and Poór, 2009) to support the conclusion that organisations invest in knowledge capital during difficult times or they see KM as a solution to the crisis. Hence, many organisations take traditional measures such as redundancy, cost reduction, postponement of investment and wage freeze. Nevertheless, there are significant differences among organisations in different countries concerning their options to ameliorate the effects of the crisis (ibid).

How suitable KM is in a period of crisis appears to depend to some extent on how people apprehend the two concepts. Koraeus (2008) argues that the main characteristics of a crisis are uncertainty, threat of core values and urgency. Although case studies (Koraeus, 2008) show that KM can be a means to acquire and exploit external expertise, this does not occur overnight. It takes time to develop an enabling KM background (e.g. building communities of practice and a knowledge sharing culture). This might be discouraging to would-be KM users, as it is contradictory to the crisis dimension in the sense of urgency. Moreover, crisis is associated with negative emotions. Recent studies in Greece (Chryssochoou, Papastamou, and Prodromitis, 2013) reveal that the most recognisable emotions in relation to the economic crisis are anger, indignation and rage. According to these writers, these emotions can be associated with collective action and political participation. Alternatively, fear and frustration can lead to individual options (e.g. personal development and immigration) and depression.

In sum, the researchers maintain that people's reactions vary from radical-violent practices towards milder responses or individual options and depression. However, the underlying causes of these reactions and how (if at all) they are related to the economic crisis remain essentially unknown, and therefore there is a need for further research in Greece and other countries (ibid). If the dominant reactions to the crisis are not supportive of effective KM or creation, then this could represent a significant problem for policy makers and businesses alike.

2.8 Conclusion

The literature review shows that the concept of KM is difficult to pin down, for it deals with one of the most debatable philosophical terms, to wit knowledge. Usually, how researchers define KM depends on how they approach the concept. The first approach suggests that KM becomes meaningful through a thorough understanding of its constituent parts: knowledge and management. However, the mainstream literature generally avoids engaging in sophisticated philosophical discussions. Most researchers delimit the concept of knowledge so as to fit to the organisational context and interests of KM, that is, practical utility and competitive advantage. The most cited and debatable categories of knowledge refer to explicit and tacit knowledge and their role in KM. However, the third generation of KM theorising and research provides a new perspective pertaining to the role of explicit and tacit knowledge by conceptualising knowledge as a thing and a flow, and the need to manage the tripartite of knowledge, namely the content (the known, knowable, complex and chaos) the process/narrative and context (the level of abstraction and culture).While the main bulk of literature maintains that organisations can acquire organisational knowledge that is free from the necessities of self-interest, infliction, sovereignty and power, it is not clear how organisational KM and the three dimensions of knowledge (personal, organisational and social) equilibrate between the different objectives respectively.

Even though the existing literature verifies that personal traits influence key KM characteristics (e.g. knowledge sharing), such correlations remain quantitatively and qualitatively vague. Moreover, the dual nature of some basic KM prerequisites (e.g. trust), that is, the personal and the social, brings about contradictions and reveals gaps in terms of how those dimensions interact with one another and shape KM perceptions within an organisation.

Similarly, research evidence finds that socio-cultural aspects, such as interpersonal relationships, interpersonal trust, group identity, national cultures, organisational cultures and sub-cultures are key causes of success or failure of KM implementations. However, there is little research, particularly within the context of SMEs, pertaining to how socio-cultural factors affect knowledge sharing and KM. In addition, taking as a point of reference Bacon's adage 'knowledge is power', the KM literature is mainly interested in

how these two concepts can affect KM development. There is a general consensus among the researchers (e.g. Politis 2005) that one of the most cited barriers to KM development, that is, knowledge hoarding is mainly attributed to the belief that knowledge is power. The intimate dynamic relationship between knowledge and power as two inseparable concepts (Foucault, 1980 in Hislop, 2009:213) that takes place in everyday human acts and relationships provides a new perspective on KM. Put another way, approaching KM through the knowledge/power lens might change the way people see it. As long as power relations arise out of negotiations concerning the relevance and irrelevance of specific knowledge assertions, as Gherardi and Nicolini (2002) put it, KM is also about the deliberate screening of knowledge in order to marginalise and dispel what is not relevant or legitimate. However, it is not clear how everyday conversations and acts in organisations shape the power-behaviour between subjective interests, beliefs and socio-cultural structures and how all these have an impact on KM practices, especially in SMEs, where in most cases the owner-manager is equated with power itself.

All the above promotes a unique interest in the context of SMEs, which bear some different characteristics compared to larger organisations, including an apparent tendency towards practicing informal KM, the centrality of owner-manager authority as KM inhibitor or KM motivator, flatter structures, closer social relationships and more fluid and organic cultures, notwithstanding the variation under the 'SME' umbrella. There exists some limited research on how such characteristics affect the implementation of KM in SMEs, but as the preceding discussion has pointed out, there are still under-researched questions, such as the basic questions of this thesis on page 13. Moreover, the prolonged continued impact of crisis on SMEs challenges the benefits of KM. Even though several studies show the positive contribution of KM in a period of crisis, there is no strong evidence that organisations consider KM as a solution to it. Hence, a better understanding of how subjective, social and political dimensions condition the perceptions and implementation of KM is necessary.

Chapter III
Research Methodology

3.1 Introduction

This thesis adopts two versions of the term methodology. The first version of the term refers to the logic and rationale which support the application of specific methods (Roberts, 2014). The second version of the term refers to a more flexible meaning, as a general approach to inquiring, which is more interested in a discussion concerning the description and the explanation of the actual course of the process (Silverman, 2000:235). This chapter describes and justifies the methods and techniques used to answer the research questions. The main purpose of this chapter is to make clear how the research was designed and implemented in terms of the underlined assumptions, procedures, decisions and ethical concerns. The following sections bring the steps of the research out into the public, so that the evidence and the conclusions can be examined and judged by anyone interested in the subject. In addition, this chapter provides the clues for other researchers to replicate the study, even though usually qualitative researchers are not interested in replication (see Daymon and Hollowey, 2002:7). Considering qualitative researchers as the main instrument of the research, the replication of a study is practically impossible (ibid) or hardly replicable (Kvale, 1994). Nevertheless, if one adheres to the integrity of the findings and to a reasonably accurate account of the steps of the research process, the quality of the study is strengthened and relevant objections to replicability are diffused (Daymon and Hollowey, 2002:7). Hence, if other interviewers follow similar procedures, they may end up with almost similar findings (Kvale, 1994:153).

3.2 Justification for a qualitative research strategy

This thesis adopted the most commonly used qualitative strategy which is aligned mainly with interpretivism and constructionism. The former denotes the epistemological orientation and the latter denotes the ontological orientation (Bryman, 2008). Other researchers have characterised this kind of qualitative strategy as the 'basic qualitative research', in order to distinguish it from other types of qualitative strategies with one or more additional dimensions, because in essence all types are also interpretive in nature (Merriam, 2009:22). On the one side, interpretivism suggests that the researcher's objective is to grasp the subjective meaning of social action. On the other side, constructionism implies that the social actors continually construct social phenomena and

their meanings (Bryman, 2008) due to the nature of the social world which is characterised by multiple and context-bound realities (Merriam, 2009).

There were at least three decisive factors that called for a qualitative research strategy and qualitative methods: primarily, the nature of the research questions as such, secondly, the nature of the investigated subject-topic itself (KM), essentially as a "social construct," and thirdly, the human nature of the actors (the people working in the organisations-the participants in the research) as the primary sources of data, and the researcher as an empathetic investigator. Many social scientist researchers would agree that the selection of the appropriate research methods is mainly driven by the nature of subject matter under investigation (Brinkmann and Kvale, 2015:346) or is highly dependent on the research questions (e.g. Bryman, 2008:395; Daymon and Holloway, 2002:15; Di Gregorio and Davidson 2008:17). Questions that are suitable for a qualitative research strategy entail how something occurs, in this case KM, how it functions in its context (i.e. in SMEs) and what it means for the actor-participants (Daymon and Holloway, 2002:15), and therefore there is a fit between the qualitative research strategy and the research questions.

Taking on Blaikie's (2010:199) argument that the distinction between qualitative and quantitative should be applied only to the level of data collection and data analysis, the researcher adopted in-depth semi-structured interviews and an eclectic general analysis as 'bricolage' (Brinkmann and Kvale, 2015:267) respectively. However, some researchers (e.g. Braun and Clarke, 2014:4), in contrast to Blaikie's view, maintain that the terms qualitative and quantitative characterise not only methods or techniques for data collection and data analysis, but also different paradigms, namely the qualitative and the quantitative respectively. Braun and Clarke, (2014) based on Kuhn's (1962 in Braun and Clarke, 2014:4) definition of the term paradigm, refer to the latter as an overarching framework of beliefs, assumptions and values espoused by a research community. Likewise Blaikie (2010), following Kuhn's definition of paradigm, ends up with two categories of research paradigms: The classical research paradigms, that is, positivism, critical rationalism, classical hermeneutics and interpretivism, and the contemporary research paradigms, viz critical theory, social science realism (or critical realism), contemporary hermeneutics, ethnomethodology, structuration theory and feminism. In a more simplistic way, Kumar (2012) distinguishes two main research paradigms that inform the research in social sciences. The first paradigm has its roots in natural sciences

and refers to the systematic, scientific or positivist approach. The second paradigm is associated with the qualitative, ethnographic, ecological, or naturalistic approach. These two paradigms inform two different modes of enquiry or two different types of research: the structured approach (quantitative research) and the unstructured approach (qualitative research) respectively (ibid:13). Likewise, Bryman (2008:22, 367, 605) avoids using the term paradigm as he considers it problematic, due to its multiple interpretations and uses. Instead he argues that, though the quantitative-qualitative distinction is ambiguous (e.g. there it is not clear-cut, there are interconnections, heterogeneity of qualitative research tradition), this might be useful as a means of classification of two research strategies associated with different methods and assumptions of social research. The quantitative research strategy and the qualitative research strategy, despite their ontological and epistemological attachments, at the level of methods of data collection and data analysis, present flexibility, for these attachments or connections are not considered rigid and ineluctable (ibid:606). Some critical realist social scientists (e.g. Danermark et al., 2002) deem the quantitative-qualitative division as imperfect, instead they suggest that in practice researchers can apply an intensive design or an extensive design and sometimes they can apply both. That is not to say that these designs should be taken without reflection and without considering the ontological and the epistemological dimensions (Danermark et al., 2002:2). In fact, they suggest 'critical methodological pluralism', in which the choice of the appropriate method is judged on the basis of the relation between metatheory and method. To put it differently, the former deals with the subject under investigation and with ontological and epistemological assumptions concerning the nature of reality and how we acquire knowledge about it (ibid:3, 152).

In sum, this thesis aligns with the technical version of the debate about quantitative and qualitative research. According to this position the researchers give emphasis and priority to the strengths of the techniques for data collection and data analysis, and see them as autonomous and susceptible to serve one or both research strategies. On the contrary, according to the epistemological version every research method is inextricably embedded in ineluctable epistemological and ontological commitments and therefore there arise issues of incommensurability (Bryman, 2008:604). However, the qualitative research is not simply a set of methods and techniques. The qualitative research is a strategy that can generate theory and answer questions if one focuses on understanding the world through

the perspective of its participants, based on the assumption that social life is the outcome of interactions and interpretations (Phillimore and Godson, 2004:4).

3.3 Semi-structured interviews as the instrument for interactive data generation

Semi-structured, face-to-face interviews were chosen as the appropriate instrument for finding answers to the research questions within the organisational business context of SMEs. Previous studies in the context of SMEs have investigated KM topics successfully using qualitative strategies and semi-structured interviews (e.g. Beijerse, 2000; Bozbura, 2007; Desouza and Awazu, 2006; Egbu, Hari and Renukappa, 2005; Evangelista et al., 2010; Hutchinson and Quintas, 2008; Lim and Klobas, 2000; Mason and Pauleen, 2003; Nunes et al.,2006; Talebi, 2011).

This type of interview, which is the most commonly used by qualitative researchers (Alvesson and Deetz, 2000:194 in Qu and Dumay, 2011:246) was preferable, for it combines two antagonistic advantages: flexibility (Braun and Clarke, 2014) and comparability (Kumar, 2012:162). In other words, the process presupposes that the researcher is interviewing with an interview schedule (or interview guide, viz a list of questions and topics) in hand, which enables the researcher to have effective control of the scope of the enquiry without being inflexible. That is, the researcher is flexible, responsive and prepared to improvise according to the flow of the dialogue with the participant. Hence, semi-structured interviews and the qualitative 'lens' in general enable in-depth probing around issues of everyday social life and are even more attuned to conditions characterised by 'messiness' and 'openness', which are more likely to have an impact on participants' perceptions (Roberts, 2014:4).

Moreover, Braun and Clarke (2014) suggest that such interviews are qualitative in nature and are useful for exploring questions associated with understanding, perceptions, experiences, influencing factors and practices of the participants. As Patton (1990) puts it, interviewing aims to find out what is in someone's head, that is, the interviewer uses in-depth interviews to elicit data from the participant that under any other circumstances could not be directly observable (Patton, 1990 in Carson et al., 2001: 75; Hannabuss, 1996:23). Likewise, Hannabuss, (1996:23) makes it clear:

'We want the respondents' own perspective to emerge, explore the ways in which people working together share common understandings, get insight into particular experiences, find out motives behind decisions, get a view of informal procedures, consider apparent contradictions between attitudes and behaviour, and allow respondents time to provide their answers. Interviews seem to answer these challenges well, and many researchers believe that they can build on their own natural communicative skills to carry the interviews out effectively...'.

In addition, interviewing is ideal in cases where the participants have a stake in the topic (Braun and Clarke, 2014). This is exactly the case in this study, for the participants mainly consist of owners/owner-managers with dominant role in SMEs and family businesses. The sample also included a small number of managers and employees in order to have data from people of a different status. Previous studies (e.g. Byrne, 2004 in Silverman, 2006:114) showed that qualitative interviewing is also an effective technique to explore these different 'voices and experiences' from people, especially from employees, who may consider themselves to be of a lower status.

The interview was also chosen as a suitable technique for data collection concerning the economic crisis and issues of power and control. In such cases, other methods are difficult to be attuned to the participant's particularities. On the contrary, the interviewer is more flexible to probe for details accordingly judging from the circumstances and the participant's will to respond as they wish, either with a straightforward answer, an indirect answer, a narrative or without giving any answer. Probing was an important part of the research in order to elicit rich data from the participants. As Hoinville and Jowell et al., (1987:101 in May, 2001:129) put it, probing is about the participant's encouragement to give an answer or to make their position clear or to amplify their position. Furthermore, as Bartholomew et al., (2000 in Crano and Brewer, 2002:224) observe, face-to-face interview has the advantage of detecting and correcting confusion on the part of the interviewee. That is, the researcher, during the interviewing process, could provide the necessary clarifications and explanations to the participant.

In sum, semi-structured interviews were used as the appropriate method in management studies (e.g. see Easterby-Smith, Thorpe and Lowe, 2002:87) to understand the underlying constructs the actors use for their beliefs about particular issues on KM, and

how these beliefs affect KM processes. In addition, this type of instrument was particularly useful for collecting data in the informal, sometimes spontaneous situations within the SMEs and when there were some sensitive and confidential issues about which the participants were more comfortable to talk about in a face-to-face interview. Last but not least, a semi-structured interview provides some control over the interview (by means of an interview schedule) and therefore assures to some extent that the research topic can be investigated and the purpose of the study can be fulfilled (Daymon and Holloway, 2002:171). This is important within the time constraints of a doctoral programme.

Nevertheless, research interviews are not without problems or disadvantages. One of the most discussed referred disadvantages is that they are time-consuming and are therefore useful for a small-scale project, a fact which might have an impact on the representativeness of the sample of respondents (Hannabuss, 1996). Other challenges for interviews refer to the fact that the researcher may be biased or subjective, or that the respondents' answers might be influenced by the interpersonal/interactive relationship with the researcher. Moreover, in extreme situations the respondent might even try to deceive the researcher without realising it by hiding information or mispresenting descriptions (ibid:24). Likewise, Kvale (1994) identified ten standard objections to qualitative interviews. These ten objections in short critique qualitative interviewing for lacking rigour and yielding trivial results. In general, these critiques are highly influenced by the positivist epistemology and approach of what is science or scientific research. Hence, a general approach in answering these critiques can be an outdated reproduction of debates pertaining to dichotomies such as qualitative versus quantitative or objective versus subjective. This thesis aligns with Kvale's (1994:148) view that the most adequate response to these critiques is to generate new, important and useful qualitative knowledge, which can be persuasive in its own right. One route, generally endorsed in this thesis and by many qualitative researchers (Kirk and Miller, 1986, Miles and Huberman, 1984 in Heyink and Tymstra, 1993:298) in order to achieve this venture is to make explicit, to the most feasible degree, the basic assumptions of the research procedures and decisions, so as to make transparent how the results came about.

3.4 Research procedures

In this section, the researcher unfolds the procedures in order to show how the study managed to gain access to the experiences of participants and how sense was made from the collection of data. From the constructionist point of view the first premiss responds to the validity of the research, while the second premiss refers to transparency and the reliability of the research (Easterby-Smith, Thorpe and Lowe, 2002:53).

3.4.1 The interview schedule

An interview schedule (see Appendix 1) consisting of ten section-topics was used, after a pilot testing, to guide the semi-structured interview. The appropriate structure and content of an interview schedule or guide enables the interviewer to build trust and understanding with the interviewee, which is a key prerequisite for interactive data collection (Reinharz, 1993 in Braun and Clarke, 2014:81). Consequently, the first section aimed to prepare the environment and establishing rapport and trust with the participant. Rapport is the researcher-participant relationship based on confidence, security and a common understanding of the research purpose (Heyink and Tymstra, 1993). In fact, the connection with the participant had already begun with telephone contact prior to the interview. Hence, the aim of this stage was to make sure that the participant was relaxed and aware of issues such as the purpose of the interview, the significance of their contribution, confidentiality, the voice recording and the time needed. In this stage, the participants also signed the consent form if they had not already signed it. After this preliminary phase, the recording phase began with two themes, namely the interviewee's personal profile and the firm's profile. The next five themes were the core of the guide, for the relevant questions structured the most common basic activities of KM, viz knowledge identification, knowledge acquisition/creation, knowledge storage, knowledge sharing and knowledge use (CEN, 2004a). The last two themes of the interview guide were the impact of the recession in the last eight years on the business and on KM, and the closing of the interview. The former was left in the last part of the interview, on purpose, for a discussion around the topic of the crisis in the early stages of the interview could have caused discomfort to the participant. In the closing stage of the interview, the participant had the chance to comment whatever they considered relevant or important to be reported. The interview schedule also included a set of questions where

the participants could show their agreement in terms of a Likert scale of five responses questionnaire[2] and a thought experiment halfway through the interview process.

3.4.2 Finding and selecting participants

It is widely accepted that essential criteria for the inclusion of participants in interviews following the qualitative strategy are their experience concerning the research topic and their willingness and capacity to share their views (Collaizzi, 1978, Polkinghorne, 1989, Wertz and van Zuuren, 1987 in Darlington and Scott, 2002:52). Following up the literature review and the previous section, at least the owners of SMEs is plausible to expect being able to develop what Wertz and van Zuuren call '*some significant relationship with the phenomenon under study*' (Wertz and van Zuuren, 1987:11 in Darlington and Scott, 2002:52). Hence, primarily, owners, KM officers (if any at all), managers and secondarily employees who could describe the experience of how KM is taking place in their organisation were potential participants. Hence, the chosen sampling method was purposive which is the most common method (Palys, 2008). This type of purposive sampling also entails elements of two sub-categories, namely stakeholder sampling and criterion sampling (ibid). The former in the sense that priority is given to owners, KM officers and managers who are more involved in KM issues. The latter in the sense that the participants who relate to the research topic should meet the criterion that they are members of a micro, or a small or a medium enterprise in one of the three business sectors, to wit trade (organisations engaged in trade of goods either as retailers or/and wholesalers) , services and manufacturing.

Originally, the research design estimated 18 participants, that is, at least one interview from each organisation of three different business sectors at the level of micro, small and medium enterprises. Finally, the field research was completed with twenty-one (21) interviews, one interviewee per organisation, as described in Table 3.1. The synthesis of the participants consisted of twelve owners/co-owners/owner-directors/co-owner-directors/owner-general managers/co-owner-general managers/owner-managers, three managers and six employees. There were 17 male participants and 4 female participants. The number of women participants was small; however, there was no bias in the selection process because the list of potential participant organisations was prepared without

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[2] The questionnaire was subsequently removed from the results due to the relatively small number of observations (interviews) and limited explanative power.

knowing the gender of their owner participant or the gender of the other appointed participants viz managers and employees. In addition, the facts after the economic crisis of 2009 show that the gap between women owner-managers and men owner-managers has broadened. During this period the analogy between women owner-mangers and men owner-managers fluctuates between 1 to 3 and 1 to 2 respectively. (Ioannidis, Korra and Giotopoulos, 2016). Hence, finding more women-owners participants would have required more time beyond the time constrains of this research. Last but not least, the synthesis of the participants included all levels of theoretical background from general to academic education and   therefore there was a plurality of views. (see Table 3.2).

The evaluation of the sample size had three phases, as this is proposed by some qualitative researchers (e.g. Guest, Bunce and Johnson, 2006, Morse, 1995, Sandelowski, 1995 in Malterud, Siersma and Guassora, 2016:1753). The first phase was part of the research design process and evaluated a provisional number of interviews. The second phase was during the field process and the sample size was continually appraised. The last evaluation of the sample size was completed with the analysis of the data and the ascertainment that the latter were capable of producing rich descriptions and what Mason (2011:136) calls 'meaningful comparisons' in relation to the research questions. This is also consistent with the exploratory nature of the study and the epistemological-ontological assumptions of this thesis which do not expect to fully capture all aspects of the phenomenon under investigation as 'a finished case' of a full description (Malterud, Siersma and Guassora, 2016:1759). It is recognised that the generated findings in the analysis were derived from single sources in the organisations (one participant from each firm) to focus on the five basic KM processes. On the one hand this might be taken as a limitation of the study to corroboration, especially in the case of larger SMEs (e.g. small and medium). That is why the questionnaire was finally removed from the study (see note 2 on p. 86). On the other hand, the participants with free spirit willingly expressed their views without upsetting the internal relationships of the firm or placing other members of the firm in an invidious position. It is this second aspect that enhances the contribution of bona fide participants and the qualitative nature of the study.

3.4.3 The strategy for selecting participants.

The researcher prepared a list of twenty-seven potential participants, that is, three participants from each sector and business size. The list was informed from the website

of each organisation on the internet. The initial contact was made through telephone calls, and the researcher asked for permission for sending an invitation letter (see Appendix 2) accompanied by a Participant Information Sheet (PIS see Appendix 3) and a consent form (see Appendix 4). Preferably, the researcher asked to speak directly to the owner or manager accordingly. However, that was not always possible, especially in the case of medium enterprises with secretariat staff and telephone centres. The second telephone contact followed a few days later, with the purpose of arranging the venue, date, and time for the interview. Some potential participants rejected the invitation from the initial contact. Other potential participants were positive to receiving the invitation letter accompanied by the informative material. The second contact was critical, for the potential participant made known to the researcher their willingness to participate or not in the interview process. Some participants replied positively and others replied negatively, as soon as they received the invitation, without waiting for the second call. Those who refused to participate in the research were deleted from the list and were substituted with new potential interviewees. The process continued until the fulfilment of the minimum numbers of interviews and when there were indications that with the twenty-one interviews the research questions could be answered adequately (see Figure 3.1).

Table 3.1			
Interviews in Organisations			
Size*			
Micro	**Small**	**Medium**	
1-9 employees	10-49 employees	50-249 employees	Sums
Trade	2	2	2	**6**
Services	4	2	2	**8**
Manufacturing	3	2	2	**7**
Sums	**9**	**6**	**6**	**21**

*Size according to the EC (2003) recommendation 361.

Table 3.2							
Synthesis of Participants							
INTERVIEW No	**PSEUDONYM**	**GENDER**	**AGE CATEGORY**	**THEORETICAL BACKGROUND**	**YEARS IN THE COMPANY**	**POST/ ROLE**	**YEARS IN THE POST**
1	Mary	Female	40-49	Upper-secondary	15-20	Employee	15-20
2	John	Male	40-49	Upper-secondary	5-10	Manager	5-10
3	George	Male	30-39	Tertiary-Higher Technological	2-5	Employee	2-5
4	Kate	Female	30-39	Tertiary-University	2-5	Manager	2-5
5	Michael	Male	30-39	Tertiary-University	10-15	Owner-Director	10-15
6	Nick	Male	30-39	Post-secondary	2-5	Employee	2-5
7	Paul	Male	50-59	Tertiary-Higher Technological	10-15	Employee	10-15
8	Andrew	Male	30-39	Tertiary-Higher Technological	5-10	Owner-Director	5-10
9	Jack	Male	40-49	Tertiary-University	5-10	Manager	5-10
10	Harry	Male	60+	Tertiary-University	30+	Owner-Director	30+
11	Leonidas	Male	40-49	Upper-secondary	10-15	Owner-Director	10-15
12	Markos	Male	50-59	Tertiary - University	5-10	Employee	5-10
13	Alex	Male	40-49	Upper-secondary	15-20	Co-Owner-Manager	15-20
14	Antony	Male	60+	Upper-secondary	25-30	Owner-General Manager	25-30
15	Peter	Male	50-59	Tertiary-University	30+	Co-Owner	30+
16	Theo	Male	40-49	Tertiary-University	25-30	Co-Owner-General Manager	15-20
17	Anna	Female	30-39	Upper- secondary	20-25	Owner-Director	0-2
18	Lucas	Male	30-39	Tertiary-Higher Technological	15-20	Owner-Director	15-20
19	Nestor	Male	30-39	Tertiary-University	15-20	Co-Owner-Manager	5-10
20	Thanos	Male	40-49	Tertiary- Higher Technological	10-15	Co-Owner-Director	2-5
21	Demy	Female	40-49	Upper-secondary	5-10	Employee	5-10
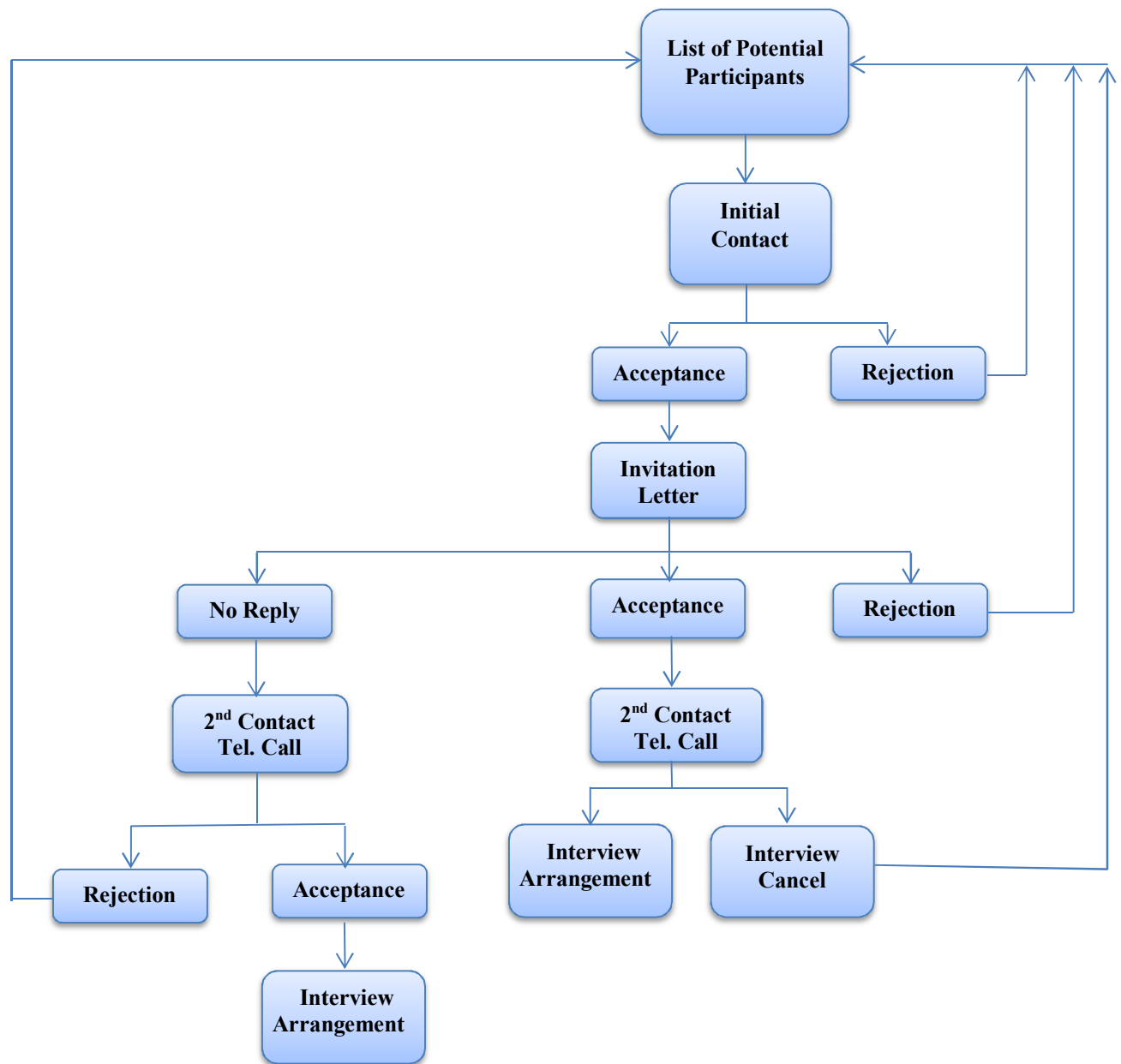
Recruiting Participants' Flow Chart

Figure 3.1

3.4.4 Conducting the face-to-face interviews

All the interviews took place in Attica in Greece, between 16-12-2015 and 14-05-2016. The exact place and time of the interview was arranged strictly according to the participant's preferences. It was important that the participants enjoyed the interview in the comfort of their place of choice at the most convenient time for them. The average

duration of the interviews was 75 minutes. The interview was recorded using two identical small high quality stereo digital voice recorders (Olympus WS853) with built-in microphones. Darlington and Scott (2002:59) claimed that a small recording device with a built-in microphone is less distracting and therefore it is preferable. In addition, the researcher avoided taking notes during the interview, as this would be distracting for the interviewee (ibid:59). Moreover, without taking notes during the interviews, the conversations flowed more naturally. The researcher was free to maintain eye contact with the interviewee for most of the time, in tandem with consulting the interview guide. Consequently, such a tactic facilitated the interaction between the researcher and the interviewee and gave a chance to the former to develop what Braun and Clarke (2014:9) call 'a qualitative sensibility'. A term which is associated with characteristics attributed to the 'qualitative paradigm', such as emphasis on process, meaning and reflexivity (ibid). In addition, without taking notes during the interview, there was time for controlling the interview situation and the interview environment against potential negative feelings and forces. Nevertheless, the researcher kept notes before and after each interview. The notes prior to the interview derived from the communication with the potential participant (telephone conversations) and from the investigation during the process of finding potential participants (e.g. the website of the potential participant). The notes after the completion of each interview were thoughts and information concerning first impressions before the process of data analysis, reflections on the process and what was new in relation to previous interviews.

3.4.5 Approaches to the interview process

There were several approaches that informed the interview process. The first approach suggests that a researcher using the qualitative approach as a human being is appropriate and perhaps sufficiently complex to understand and learn about other human beings (Lave and Kvale, 1995 in Fink, 2000). Therefore, many researchers (Guba and Lincoln 1981, Merriam, 2002 in Pezalla, Pettigrew and Miller-Day, 2012:166; Denzin and Lincoln, 2000: 368, Marshall and Rossman, 1995: 59-65 in Poggenpoel and Myburgh, 2003:418; Lofland et al., 2006:3 in Xu and Storr, 2012:1) acknowledge the researcher as the primary research instrument in semi-structured interviews and in qualitative interview studies in general. However, how researchers understand their role as 'the research instrument' is open to dispute. As Pezalla, Pettigrew and Miller-Day (2012:182) pointed out, researchers have different characteristics, use different styles and are 'differently calibrated

instruments'. In fact, there are studies that have questioned the traditional styles of empathy and self-disclosure as means of building rapport or trust with the participant. For instance, Tanggaard (2007) criticised the empathetic style as inappropriate, because it has the tendency to create a shallow and frivolous form of friendship between the interviewer and the interviewee. Similarly, Abell et al., (2006) criticised self-disclosure as a means of building rapport, for it may cause the opposite results of the expected (viz, distance the interviewer from the interviewee), in cases where the self-disclosure gives the impression that the interviewer is more knowledgeable than the interviewee. The above views in fact verify that, concerning qualitative interviewing as an interactive process between the researcher and the participant, there are no easy answers as to which style is right or wrong. As Silverman (2006:112) puts it, there is no purpose to saying which interviewing style is best, for there are no absolute standards to presume, for instance, what works best: passive or active. Hence, the interviewer, as the primary research instrument, has the potential to influence the collection of data (Pezalla, Pettigrew and Miller-Day, 2012:166) and therefore many researchers (Ellis and Berger, 2003, Pillow, 2003 in Pezalla, Pettigrew and Miller-Day, 2012:166) advocate reflexivity from the part of the interviewer as the 'antidote' or the 'remedy' to the issue. According to Mason (2011:7) active reflexivity should be an inextricable part of qualitative research. Active reflexivity or critical self-scrutiny by the researcher, is about self-questioning and challenging their assumptions, thoughts, actions, and decisions to the extent that they can influence the research process (ibid). To put it differently, Mason (2011:7) refuses to accept the belief that a researcher can be neutral, or objective or detached from the process and what is generated from it. Hence, from Mason's (2011:52) point of view, what the researcher really does in the interview process is that of generating data rather than collecting data. However, in practice, some researchers (as in this thesis) prefer to derive their data in a balanced manner, using three intertwined methods, namely literally, interpretively and reflectively (ibid:78).

The second approach, which in fact is a consequence of the first, suggests that qualitative research interviewing may be adequately described as a craft rather than a method (Brinkmann and Kvale, 2015:72). Unavoidably, the researcher's competencies, skills, sensitivity, and previous knowledge inform the quality of the research process. That is not to say that interviewing as a craft is without relevant theories and methods. The researcher as a craftsman interviewer avoids using rigid rules or is less dependent on them

because the knowledge of interviewing in the wide sense (including personal know-how, skills, tacit knowledge) to a large degree remains content and context bound (ibid).

According to the third approach, the researcher should continue building rapport and trust with the participant throughout the interviewing process by adopting a style based on respect, openness, awareness, sensitivity and responsiveness. This style has been characterised by Patton (1990 in O' Donoghue and Punch, 2003:20) as empathetic neutrality. Neutrality, in the sense of not being judgemental, reinforced rapport and trust which in turn supported empathy (ibid). Having always in mind that the success of the interview is highly dependent on the relationship between the researcher and the participant, the role of the former resembles that of an orchestrator, who stands between encouraging and controlling an interactive dialogue, while at the same time reflecting and checking on the progress of the interview (Hannabuss, 1996:25).The research questions, or what Brinkmann and Kvale (2015:112) pose as the basic question, 'What would I like to know?' determined to a large extent the position of the researcher as pollster and prober. While the former is mainly interested in bringing out the participant's opinions and attitudes, the latter is interested in finding what the participant hides behind what is reported (ibid:109). In the same way, the interviewees were approached as reporters, teachers and informants according to Foley's (2012 in Brinkmann and Kvale, 2015:112) distinction, because the research questions and the context justify such constructions. For instance, the interviewee as a reporter was supposed to talk about facts or opinions, attitudes, and previous experiences, without challenging what she/he was saying. The second approach, as a teacher the participant was expected to be responsive to the researcher's probing and was encouraged to reveal her/his voice. Finally, the third approach, the interviewee as informant was not discouraged but rather she/he was stimulated to critically defend her/his beliefs and actions. Taking into account the uniqueness and the diversity of each participant in terms of inherent and acquired features, the flexibility in switching from one approach to the other enabled interactive conversations within the scope of the semi-structured interview.

3.4.6 The transcription process

The theoretical perspectives that informed the development of the transcription and the relevant decisions are congruent with the interpretivist perspective. The latter considers

transcripts as 'theoretical constructions' (Lapadat, 2000:2008 in Davidson, 2009:39) and therefore deems unattainable the positivist approach which views transcripts as objective representations of reality (Green et al., 1997 in Davidson, 2009:39). The interpretivist perspective acknowledges the complexity of the transcription process and therefore the researcher bears the burden considering the choices of what and how to record in transcripts (ibid:39). The interview recordings remain the primary source of data, while the transcripts are data in the sense that they are used as a secondary source or as a 'scaffold' for analysis. That is why some researchers view transcript as a reduced version of the interview recording (Davidson, 2010:115). Consequently, this section aims to disclose how the transcription process was informed and unfolded through this study.

The transcription process started after the completion of the first interview, continued in tandem with the process of interviewing, and ended after the completion of the last interview. Following the recommendation of some expert researchers (e.g. Rowley, 2012:267), the researcher listened to the recording of each interview almost immediately after the interview (usually within the same day or the day after). This first listening prior to transcription was an overall review of what was said in the interview. It was also a kind of self-criticism and reflection concerning the interviewing experience and how that could inform the subsequent interviews and the transcription. This 'pro-transcription' process was systematised in an interview summary form, including information on the interviewee's profile, on the organisation's profile and notes concerning the general climate of interviewing, impressions, the effectiveness of the interview schedule and so on (see Appendix 5). Between the first and the second interview there was an interval of one month which allowed for a thorough organisation for the subsequent interviews. It is worth mentioning that the first listening was particularly useful to the interviewing process, for the transcription process was impossible to keep in pace with the interviews.

The researcher transcribed the interviews on the Express Scribe Transcription Software (Pro v 5.85 of NCH Software) and then exported the produced texts in Microsoft Word files. The decision and commitment for transcribing all the interviews by the researcher was part of the research design and of the ethical approval. Although most researchers would agree that transcription is necessary for a systematic analysis of a qualitative interview (Darlington and Scott, 2002:143; Daymon and Holloway, 2002:179) and that its omission is at the expense of completeness, accuracy and retrievability (Lapadat and

Linsay, 1999:78 in Lapadat, 2000:2014). Some others warn about the risk that the researcher could be confronted with too many pages, what Kvale (1997:176 in Clausen, 2012:1) calls 'the 1000-page question' because of the researcher's will to interview the maximum possible or the appropriate number of people. With such a lengthy transcript, researchers might find themselves 'lost in transcription' or as Silverman (2005:349 in Clausen, 2012:1) warns 'drown in the data'. However, this is not an insuperable problem, as it will be explained in the following section, for there are modes of analysis such as coding which can successfully deal with large data sets (Brinkmann and Kvale, 2015:228). Alternatively, some researchers suggested that under certain conditions audio transcriptions can be adequately replaced by taking notes without harming the quality of the research (e.g. Clausen, 2012). Others suggested a general level of transcription of the entire set of interviews and then a focused second-round re-transcription for detailed analysis on sections of special interest (Riessman, 1993 in Clausen, 2012). Although transcribing the entire content of all interviews (audio data) does not assure by itself unconditional superiority in terms of the transcript quality (Tilley, 2003 in Witcher, 2010:129), it is widely accepted that this is associated with advantageous conditions in respect to data trustworthiness (Easton, McComish and Greenberg, 2000, Tilley, 2003 in Witcher, 2010:129). Consequently, taking into account the research questions and the analytical needs for answering these questions, the researcher chose to transcribe the interviews orthographically. The aim of this orthographic (or verbatim) style of transcription was to produce what was said between the interviewer and the interviewee (Braun and Clarke, 2014:162) and what was useful for the research purposes (Brinkmann and Kvale, 2015:213). Consequently, based on the assumption that this research is interested mainly in the content of an interviewee's comments, the level of detail of transcription included all verbal utterances and obvious indications of emotional non-verbal utterances, such as laughing and other contextual sounds of apparent hesitation and scepticism.

The first round of the transcribing process was time-consuming and exhausting. There were parts of the interviews which the researcher played them back and forth many times in order to capture and record the exact words used by the interviewee. The transcription software facilitated this process by choosing different modes of play speed. Nevertheless, the transcription was highly rewarding and an exciting empirical process in many respects. The researcher re-lived the interview experience with the strange feeling of

someone hearing himself in the role of the interviewer. The transcription process not only enhanced familiarity with the data (recordings), which enabled the methodological and theoretical approach to inform interpretation (Lapadat, 2000:204), but also functioned as a means to get at them (Hutchby and Wooffitt, 1998 in Davidson, 2010:116). Moreover, the first round of transcription offered the platform for further re-transcriptions in the sense of checking the accuracy of the transcript, anonymising transcripts by changing or removing identifiers (any piece of information that could identify the interviewee) and deciding on details such as issues of punctuation and the readability of the texts. The second round of transcription took place in a Ms Office Word environment. On the right-hand side of the page the transcript was informed with comments and notes that enabled the analysis and the interpretation of data. On completion of the second round, 700 pages of transcription were produced and the research process moved onto the analysis of data.

However, in essence, the transcripts remained in a 'provisional state' open to fine-tuning until the end of the analysis and the finalisation of the results. In fact, the analysis process entailed listening to the recordings of the interviews many times, and therefore worked as an audit of the transcript faithfulness, to the extent that what was written in the text reflected clearly what was uttered in the audio recordings. This is considered important for the trustworthiness and quality of the transcription (Poland, 1995) but it is also an ethical imperative towards the interviewees (Berg, 2004, Kelly, 1988, Richards and Morse, 2007 in McNulty, 2012:6).

3.4.7 The analysis process

In some way, the analysis process of data had already begun with the transcription process or even earlier in the phase of data collection and note taking immediately after each interview. Notes, ideas and thoughts informed the analysis process. Rightly then, some researchers (Braun and Clarke, 2014:173) deem transcription as part of the analytic process. The transcript worked as a stepping-stone towards managing the 700 pages of text and offered what Riessman (1993 in Braun and Clarke, 2006) names familiarisation with the data. Hence, the critical question in this phase was how to get the most out of the data, that is, the original recordings and their representation in the transcript in order to answer the research questions. What has been said so far regarding the objectives of this research, the qualitative research strategy, the assumptions, and the previous decisions

have their role and share, considering the rationale for the selected process of analysis, which is an eclectic combination of multiple modes of interview analysis or what Brinkmann and Kvale (2015:267) call 'bricolage'. The researcher as a bricolage interpreter is compatible with the assumption which considers the researcher as the main research instrument and interviewing as a craft rather than a method (ibid:20).The term 'bricolage' in this context denotes activities analogous of crafting and fabricating, something very close to the term 'do-it-yourself' and 'tinkering' (Altglas, 2014:474) and therefore it is synonymous with creative practices in qualitative enquiry (Denzin and Lincoln, 1999 in Rogers, 2012).This approach is opposite to other connotations of the term, like amateurish and not serious practice, that is, arbitrary patchworks in the sense of 'anything goes' (Altglas, 2014). Therefore, interpretive bricolage, according to Denzin and Lincoln (1999 in Rogers, 2012), is associated with a reflexive stance in terms of how the pieces of an enquiry fit together and how the researcher's engagement can affect the research process. Advocates of bricolage research (e.g. Berry, 2004a, Kellner, 1999 in Rogers, 2012:2) claim that the approach enhances the possibilities for knowledge construction, for the pluralism of perspectives amenable to analysis and critique enable a more holistic grasp of the phenomena, in parallel with the development of alternative readings and antithetical practices (Kellner, 1999 in Rogers, 2012:2). To put it differently, bricolage is amenable to deal with the complexity of the social world. In practical terms the bricolage approach is combined with ad hoc techniques of interview analysis able to produce meaning, ranging from the descriptive to the explanatory and from definite/specific to the more theoretical and abstract (Brinkmann and Kvale 2015:268). It is widely acknowledged by many researchers that analytic tools, such as coding (without being attached to any specific theoretical basis), work as the basis or as a preparation for more specific analytic procedures (ibid:222). Moreover, some researchers promoted coding to more sophisticated techniques of analysis, to whit thematic analysis (e.g. Miles and Huberman, 1994; Braun and Clarke, 2006).

The first step after completion of the transcript of each interview was to open a new Microsoft Word file for Chapter IV -Analysis of Findings and Discussion- and write down the headings without any content. The headings comprised in purpose the basic processes (overarching themes) of KM, viz knowledge identification, knowledge acquisition/ creation, knowledge storage, knowledge sharing and use of knowledge which reflect the first research sub-question: 'How do owners/managers and employees understand and

practise KM in SMEs?' that is the subjective dimension of the core question. The purpose was to start writing the analysis chapter immediately by passing the provisional themes. In such a way, a 'patchwork' of potential themes gradually formed the first draft of analysis.

The second step was to draw out from the data potential relevant codes. A code is any particular piece of information (word, brief phrase and question) which can be relevant and useful directly or indirectly to the research questions. In Braun and Clarke's (2014:207) analogy provisional codes consist of the building blocks of analysis. As some researchers (Coffey and Atkinson, 1996:34 in Ryan and Bernard, 2003:88) suggest, the initial round at generating themes usually comes from the interview schedule. However, a coding analysis based only on the questions and topics of the interview was not enough for the thesis' analytical purposes and therefore additional elements were required to produce a systematic overview of the data. In order to enhance the possibilities of identifying the relevant themes in answering the research questions, the researcher followed a combination of a bottom-up approach or data-driven approach and top-down approach. In the former, the identification of themes is generated from the data itself, while in the latter the researcher relates and collates theory to the data (Braun and Clarke, 2014:178). Likewise, other researchers (Ryan and Bernard, 2003:88) consider the themes emerging from the data as an inductive approach, while the themes coming from prior theoretical understanding and the literature review as an a priori approach.

Consequently, this process produced twenty-one Microsoft Word texts as many as the total number of interview transcripts. The information in this cross-sectional indexing template or coding template (Appendix 6) included nine codes (or features of the data see Braun and Clarke, 2014:224) for the interviewee's personal profile (PF1-9), seven codes for the company's organisational profile (OF1-7), fifteen codes for knowledge identification (KI1-15), six codes for knowledge creation (KC1-6), five codes for knowledge storage (KS1-5), forty codes for knowledge sharing (KSH1-40), five codes for knowledge use (KU1-5), three codes for economic recession (REC1-3) and some additional codes, such as what was repeated by the participant (REP), what the participant considered important (IMP), what was surprising (SUR), what was interesting (INT), what reminded a theory or concept (REM), contradictions (CON) and finally an 'all-inclusive' code for key features and general comments (KF). Then, the 21 Word files

were exported into a Microsoft Excel file, and each Excel sheet was labelled with the above code identification. The Excel file served as a space of reference and collation and as a 'working platform' for further analysis.

The coding process and the identification of themes was an iterative back and forth process between the transcripts, the Ms Office Word working files, the Ms Excel working file and the interview recordings. Multiple readings and listening from different perspectives enabled the completion of the analysis chapter. First readings provided only what was generally apparent in the texts. Meaningful and plausible interpretations beyond the obvious required much greater effort, based on imaginative and effective reading and listening. Effective listening is more than taking in the words of the interviewee but rather to grasp the underlying facts and feelings (Jones, 1986:49). Gabriel (2015:335) advocates creative imagination as a future virtue of paramount importance in conducting qualitative analysis and research in general. From this point of view, to treat the qualitative interview material as a terrain rather than distinct pieces of information (data) where one can find certain things that are amenable to produce meaning, insights and, why not, pleasure, is like someone surveying a beach searching for valuable things in the midst of a place characterised chiefly by sameness and predictable stuff (ibid). In practical terms, listening carefully line, by line many times to the interview recordings by posing the right questions, as Gabriel suggests, offered additional power to the analysis process.

3.5 Ethical Considerations

The University Ethics Sub-Committee for Media and Communication and School of Management granted ethical approval (Ethics Reference: 30-11-2015/3442-ad307-schoolofmanagement) to the research based on the submitted application and documentation. The ethical approval form was not accepted outright on the first submission. The Ethics Committee issued a request for more information and clarification on some ethical issues. The raised concerns were chiefly about potential unidentified risks pertaining to issues of anonymity-confidentiality, vulnerability and sensitive topics, and therefore prompted the researcher to reconsider his role proactively and actively in relation to dealing with potential ethical risks. The ethical approval process left the research in a stronger position both from an ethical and methodological point of view. As Brinkmann (2007) pointed out, qualitative research and ethical considerations in social

sciences negotiate the same subject matter: qualities of actions, emotions and characters. Qualitative research and ethical considerations and ethics in general are intertwined, for they share the same ground of human experience, that is, the ground of meaning, normativity and intentionality, things which are not amenable to quantification. To put it differently, ethical and epistemic issues in qualitative research converge at the level of capabilities, for the capabilities of being knowledgeable, structuring, clear, gentle, sensitive, open, steering, critical, remembering and interpreting (capabilities of a good qualitative researcher, see Kvale, 1996:148-149 in Brinkmann, 2007:137) can be at the same time ethical and epistemic. In addition, the ethical stance of the researcher was shaped by the assumption that the relation between him and the interviewees, is to some extent, a power relation and he therefore bears the burden to protect them. This is based on the principle that power engenders duties and responsibilities, while vulnerabilities engender rights (Harré, 2005 in Brinkmann, 2007:131).

In the rest of this section the researcher presents the main points of the assessment of ethical risk and their level of significance in terms of the subject matter and sensitive topics, the participants, the location of participation, confidentiality issues and the researcher's personality, as these were planned and finally guided the research.

In fact, the research topic does not belong to those issues that are conventionally characterised as 'sensitive' such as sexuality, child abuse and death, that are emotionally laden or spark feelings of dread or awe (Farberow 1963 in McCosker, Barnard and Gerber, 2001). However, Lee (1993) suggests a more comprehensive approach to the issue of 'sensitivity' based on context, cultural norms and values. According to Lee's perspective, there are three problematic subjects in terms of sensitivity. The first refers to what is deemed private, stressful, or sacred (e.g. sexuality or death). The second is relevant to those issues that might cause stigmatisation or fear in case of disclosure (e.g. illegal behaviour or sexual preferences). Finally, the third issue refers to the cases where political threats are embedded in subject areas of controversy or social conflict. Considering the above approach, this thesis' research topic generally implies low sensitivity. However, while there were no apparent indications of high potential risks to participants, some of the proposed questions had the potential to cause some discomfort or stress.

For instance, questions that could cause discomfort, stress, fear and anger were:

-What is your type of employment?

This question, if probed insensitively, could cause fear or stress to participants whose employment status is associated with undeclared work. First, it was beyond the scope of this research to investigate such practices, and therefore such questioning was out of scope. Second, the interviews were scheduled to take place in a sufficiently private setting, to protect confidentiality. Third, no real names would be used, and all identifiers would be removed. The interviewees would be aware of this, as well as the fact that anything they divulged about undeclared work would not be traceable to them by a third party. Fourth, the interviewees' participation was entirely voluntarily, and they were aware that they could withdraw any time they wished without giving explanations.

-How many employees work for the firm? What is their type of employment?

Under certain circumstances (e.g. undeclared work and illegal employment), these questions might be considered sensitive by both owner-managers and employees. The former could feel that relevant pieces of information which denote or imply illegal practices could harm their firm (e.g. reputation, status, penalties from authorities) or them personally. Likewise, the latter could feel that they could endanger their loyalty to the firm and could be susceptible to consequences imposed by their employers. The same measures applied as noted in connection with the above question in order to counteract potential risks.

-Are there open relations between subordinates and superiors?
-How would you characterise the nature of employment relationship within the firm?

These kinds of question, which touch on issues of 'power distance' from the side of the employee, raise potential ethical risks. Employees could consider themselves vulnerable to revealing details concerning their relations with their superiors or colleagues. The same measures, as noted above, counteracted potential risks.

-How has the economic recession affected you personally in terms of your job? -How did the economic crisis affect your firm?

In general, the economic crisis has affected almost all Greeks, one way or another. SMEs bear the brunt of the eight years of continued economic crisis. According to OECD (2009:6), SMEs are generally more vulnerable in times of crisis, as they have limited alternatives and more constraints. Recent studies in Greece (Chryssochoou, Papastamou, and Prodromitis, 2013) reveal that the most recognisable emotions in relation to the economic crisis are anger, indignation and rage. That is not to say that all people and organisations would respond in the same way. On the one hand, some people acknowledged the importance of KM in times of economic crisis, and therefore were expected to be positively predisposed. On the other hand, some people could be ignorant, sceptical or even negative to KM. The latter could have associated KM and the economic crisis with experiences such as redundancy, cost reduction, postponement of investment, wage freeze or wage cuts and so on. At this point of the interview, respondents were explicitly reminded of their right to withdraw from all or part of the interview if they did not wish to continue, and probing questions would be kept to a minimum (the interviewer would not seek actively to elicit any emotional response that respondents could have had, unless they freely and without pressure volunteered such information). If they appeared to be, or stated that they were discomfited, then the interview would be temporarily halted, and the respondent would again be told that they could end the interview if they wished. So, the interviews were planned and conducted with overt sensitivity to the problems that respondents could have faced.

The participants, owner-managers/managers/employees were not particularly vulnerable people or people under 18 years old. In order to avoid ethical problems, this research originally intended to avoid interviewing two persons from the same organisation who were connected in a hierarchical relationship (e.g. an employee and their line manager). This would minimise the risk of (a) upsetting the internal relationships of the firm and (b) placing the employee in a potentially invidious position. Finally, the interviews were individual (one person per organisation) at a place and time convenient to the participants. The participants would be fully aware of the ethical imperatives of the study, especially the need for them to give their consent freely and without obligation, and for them to understand that the project as purely academic in nature was not connected in any way to the requirements of their job. This imperative would also be made clear to the respondents

when first contact was made, as with their right to withdraw their participation at any time without giving a reason.

As far as the confidentiality issues are concerned, the researcher was committed to remove, mask or substitute with pseudonyms any potential identifiers or links relevant to the participant or the organisation. Moreover, confidentiality was secured against potential external linkages to third party, for the transcription process was made by the researcher himself.

It is worth mentioning that, in the first submission for ethical approval (in the first draft of the participants' consent form) the researcher left the option for the interviewee to decide whether she/he would use her/his name or a pseudonym. The Ethical Committee required a clear rationale as to how such a deviation from the standard ethical tactic of anonymity would be managed. The researcher's original rationale was that, though anonymity is ethically required to protect participants from any potential harms, this can be seen from a different point of view as denial to the right of the participant to connect her/his voice and name with their statements (Parker, 2005 in Brinkmann, 2007:129). To put it differently, even anonymity which is highly valued by most ethical codes, stands to some extent as a manifestation of a power technique that mutes the participants and leaves the researchers free to interpret their sayings according to their interests (ibid:129). However, after re-consideration the researcher amended the consent form and the participant information sheet by deleting the option of the participant to make use of their real name, for there were no practical ways to manage potential risks in case of the disclosure of participants' names. Moreover, there were some additional issues that engendered concerns to the researcher. For instance, the decision of a participant not to preserve her/his anonymity could be based on hasty assessment or ignorance of potential risks, which the participant might regret silently or explicitly any time in the future after signing the participant consent. In such a case, the consequences could be unpredictable for both the researcher and the participant.

The researcher's role as the primary instrument of the research and as the bearer of the ethical responsibility for the participants peaked during the interviewing process. The fact that the research had an academic formality, and that the researcher was a fifty-year old man, gave a positive status to approaching the participants. The researcher presented

himself as a person who wanted to learn how people perceive and practise KM in their workplace without attempting to impress with his knowledge. Consequently, the researcher was prepared to handle power relation feelings relevant to the status of interviewer-interviewee (e.g. in the case of indications that there were feelings of power distance due to the age gap or the lack of knowledge). Such cases were very few and they became perceptible early in the recruiting phase of the telephone conversations and/or even just before the actual time of interviewing. Establishing rapport with the participants was based on mutual respect and entailed a position of equality as fellow human beings (Daymon and Holloway, 2002:181) and sincerity, and therefore the so-called 'faking friendship' (Duncombe and Jessop, 2002 in Brinkmann, 2007:129) was considered as an unacceptable and unethical means for building rapport in order to acquire knowledge. Building a relationship of trust with the participant presupposed no conflicts of interest for the researcher, the assurance of anonymity and confidentiality, explaining the purpose of the interview, their right to withdraw at any time, and the importance of their contribution. During the interviewing process the researcher was constantly vigilant and actively listening in order to detect any sign of discomfort or stress on the part of the participant.

In sum, ethical concerns and ethical considerations were an inextricable part throughout this research. Ethics in qualitative research is more than a checklist of rules, ethical guidelines and planning ahead judging from the consequences. Hence, the main ethical duty of a researcher, which is to apply in practice what Løgstrup (1956 in Brinkmann, 2007:132) defined as ethical demand, that is, handling issues that can affect the participant's life, based on an informed judgment of the situation that specifies this demand, also has an impact on the quality of the research.

Chapter IV

Analysis of Findings

4.1 Introduction

This chapter and the following aim to answer the research questions of this thesis. The analysis of findings is structured in accordance with the five basic KM processes. As mentioned in the research methodology chapter, the KM breakdown into the five basic processes was used in the interview schedule. The KM breakdown offers the potentiality of approaching the concept of KM on a more concrete and familiar basis without using specialised terminology. Moreover, it facilitates the process of analysis as a platform for comparisons with the literature review. The synthesis of findings is presented in the discussion chapter V.

4.2 Analysis of Findings

Firstly, it is important to note how the participants framed the concept of knowledge. The concept of knowledge was understood as practical ability, skill, experience, knowing the facts, scientific knowledge, information in context, information plus intellect, learning and sometimes intuition. Most of the participants laid particular stress on the individual/personal nature of knowledge and there was no use of specific terminology in the development of their views. It is noteworthy that none of the participants used the term 'wisdom' or 'practical wisdom' during the interviews. It seems that these concepts were entirely out of their terminology. That is not to say the participants were practically unwise, nor that they were de facto practically wise in every respect. Despite the fact that practical wisdom was not formally part of their management, practical wisdom, in the sense of making situated and contextual judgments, was inextricable part of everyday practice (irrespectively of how successfully it was exercised) in decision making, strategic choices, organisational issues and human resource management. With these qualifying observations in mind, the discussion now unfolds to a dissection of the first KM activity.

4.2.1 Knowledge identification

The importance of knowledge identification was generally recognised at both individual and organisational level, even without applying formal procedures. Paradoxically, the manifestation of the importance of knowledge identification process at organisational level was contradictory and subjective. On the one side, most of the participants acknowledged that the process is so important that it requires the involvement of all members of the organisation. On the other side, a few participants reported that because of its importance, knowledge identification remains within the exclusive competence of their management. The grounds for this type of management, which can be characterised as autocratic and centralised, mainly stem from the small number of employees and the labour/capital intensive nature of the organisation. Additionally, the need for knowledge identification is imposed by external mechanisms as requirements for conformity with regulations, qualification schemes and accreditation. These external requirements can be seen as push factors or driving forces of a political nature ('the power to'), for they enable the accomplishment of certain goals within a competitive environment. Likewise, the nature of the organisation (e.g. project-based provided services which presuppose health and safety measures and knowledge-intensive firms) discourages power relations and encourages employment relationships which subsequently contribute to the development of a knowledge identification discourse. Knowledge identification at individual/personal level has a highly political nature, for it is the first step for acquiring 'the expert power'. The latter is a desirable asset/capability for both employers and employees. The following sections reveal how the basic actors perceive and practise the process of knowledge identification in their organisations.

The owners

All owners/co-owners/owner-directors/co-owner-directors/owner-general managers /co-owner-general managers/co-owner-managers said that they apply some kind of knowledge identification process under their guidance and responsibility: that it is clear within the firm what the firm wants to achieve and the know-how, information, skills (hard and soft) that are required to make it happen. Most of the owners asserted that the employees and managers have active involvement in the processes. That is, the process could be characterised as a two-way top-down and bottom-up approach. In the main, they believe that the sources of knowledge are both internal and external. However, the level and the quality of knowledge identification vary. This is based on the fact that knowledge

identification is influenced from the owner's experiential learning, emotional attachments (especially in family businesses), mental models and generally to their capability for making situated judgments. The approach of knowledge identification includes simple techniques or tools such as discussions, brainstorming, reporting, continuous informing, learning and training, and more sophisticated tools such as customer relationship management (CRM) software, external support from consultants and networks of knowledge and corporation. The latter, for instance, provide technical support, consultancy and the so-called 'mystery shoppers' in order to reveal weaknesses, deficiencies and problems in customer service.

Two owner-directors [Int:10, Int:17] revealed that knowledge identification remains exclusively their responsibility, and that the personnel are not involved in the process. As both are family businesses, these owner-directors discuss such issues with family members. In addition, these owner-directors put high emphasis on their personal contacts with customers, other counterparts from other companies and the elite of the sector. The emphasis, therefore, is to identify knowledge from the external environment, for the sources of knowledge chiefly come from outside the organisation. The rationale for such an approach to some extent revolves around subjective points of view. The employees have only a partial view of the required knowledge and limited engagement with external sources of knowledge. In contrast, the owners have the entire control of the organisation and they do not see the need to discuss knowledge issues with non-family members. However, one of the participants (Anna, Int:17) admitted that, when once she hired a qualified employee for a non-skilled post, knowledge sources can also be found within the organisation. Anna emphatically stated about this employee: *"He helped me a lot in my work in such a way that I could never expect"*.

The managers

Jack, a manager of SER-MEDIUM-COM2 said that knowledge identification is guided by a top-management (top-down) approach but it is also a bottom-up approach, for the employees participate actively in the processes. Though knowledge identification and KM have no formal procedures as in multinational organisations, (Jack had previous experience in such organisations where KM was an inextricable part of their operation), they have their way to manage the knowledge within the organisation. That is, KM practices derive mainly from the actual needs, without formal plan, and are directly

associated with the organisation's everyday activities. They do not follow some kind of a formal quality assurance system, yet they maintain procedures, and the organisation's principles and philosophy are available for everyone on the internet. Likewise Kate, a manager of SER-MICRO-COM1 said that knowledge identification is an integral part of their business plan. John, a manager of MF-MEDIUM-FCOM2 said that there is no organised knowledge identification as a formal process and things are done in a simpler way. John revealed that, though the company maintains a quality assurance system, the knowledge identification process remains inadequate. That is, the system exists for the sake of typicality. One of the main differences between the three managers is that John works for a family business, where the owner-manager is mainly responsible for knowledge identification. Hence, managers and employees discuss issues and express their opinion on demand, that is, whenever the manager-owner asks. It is obvious from John's discussions that he acknowledges the stereotypes of a family business which want the owner-manager centralised and to some extent autocratic. There are three interesting points that one can extract from this interview. First, knowledge identification at organisational level, which is a strategic process for finding out what the organisation wants to achieve and what the requirements are to make it happen, is primarily the owner-manager's responsibility. The personnel are involved occasionally. Second, knowledge identification at personal level is not supported by the organisation as, there is no human resource department. On the one hand, John acknowledges the lack of human resource management processes to support personnel in knowledge identification. On the other hand, he considers that the latter should be the employees' concern and responsibility. Third, even when knowledge identification takes place, that does not guarantee that the organisation will implement a decision founded on facts or rationality. Sometimes emotional family factors may impede the organisation's implementation of rational and factual decisions. For instance, John gave an example where a family member occupies a certain position in the company without having the required experience. Moreover, knowledge identification is influenced by the fact that the owner-manager has no education on management and marketing, so his main focus is on production, something that he knows very well by experience. According to John, businessmen like his employer (who began their career as craftsmen) find it difficult to invest in something like marketing or management because they are not familiar with such issues and they cannot see the benefits of such an investment.

Here is an abstract from John's interview.

-Interviewer: *"Has the company compiled a gap analysis in order to find what skills are needed and what information and knowledge are necessary?"*

-John: *"No, I think it has not been done."*

-Interviewer: *"And who decides what knowledge is relevant, not relevant or legitimate in the company?"*

-John: *"Chiefly the owner, because this is a family business."*

-Interviewer: *"Do you discuss such issues?"*

-John: *"Such issues are discussed. Many times, things are acknowledged or gaps (inadequacies) or issues. Nevertheless, there is a big difference between the fact that I understand the problem, I decide which strategy to follow and I implement what I have decided."*

The employees

There are two mainstream views in these companies according to their employees. The first deems that knowledge identification is guided by the owners/top-management and the personnel participate, regularly or occasionally, accordingly. There are no formal procedures and the whole process usually takes place in meetings and discussions. The employees from the family businesses MF-MEDIUM-FCOM1, TR-SMALL-FCOM1 reported the least involvement in knowledge identification process compared to their counterparts in non-family businesses. Mary from MF-MEDIUM-FCOM1 made the same point as John, the manager of MF-MEDIUM-FCOM2, concerning the owner-manager who began his career as a craftsman. In the same vein this owner-manager is willing to invest in production and neglects other knowledge areas such as human resource development, marketing and sales. The second mainstream suggests that knowledge identification is a systematic collective effort driven mainly from the front-line managers and employees to top-management. This bottom-up approach is based on written procedures for SER-MEDIUM-COM1 and SER-SMALL-COM2, and on unwritten procedures for SER-SMALL-COM1.

Knowledge identification begins at personal level

All interviewees acknowledged that knowledge identification begins at a personal level, for every individual is responsible for their job. However, some employees (Int:1, Int:3) revealed that the employees take a disproportionate burden on knowledge identification,

for some employers are unwilling to provide informing, training and opportunities for learning or are simply unable to support it.

Mary, an employee of MF-MEDIUM-FCOM1, said that everyone who wants to be the best employee ought to identify continuously what knowledge is necessary so as to do their job. A good employee should care and take the initiative for their personal development; otherwise they will find themselves without a job. The power of the employer to make redundancies and to lay off staff, forces the employees to take initiatives for their personal development skills by undertaking the cost of their education or training. A characteristic passage of the dialogue.

-Interviewer: *"So, you say that everyone is responsible to find what knowledge is missing or what knowledge is available in the company in order to do their job?"*

-Mary: *"Exactly."*

-Interviewer: *"Do, you agree with this?"*

-Mary: *"This is it. And 90% of business in Greece, not to say 99%, and risk appearing to be exaggerating, will do nothing about their employees' education. They will demand of their employees to be the best, under the fear of losing their job. So, an employee is compelled to try to find a way out, or they will lose their job."*

A similar position with a different tone comes from George, an employee of TR-SMALL-FCOM1. George reported that in fact knowledge identification at personal level is also imposed by the fact that small enterprises are unable to support organised knowledge identification systems and human resource development support. This is a disadvantage of small family businesses. However, George has not only accepted the fact that he has to work under these conditions, but he and his co-workers are also willing to cover knowledge gaps with personal efforts and hard work. Hence, experiences from daily practice, informal discussions with other more experienced employees and interpersonal relationships with customers form the most important sources of knowledge. The following characteristic extract shows that George has compromised with the idea that, because he works within a small family business, the lack of a formal KM system is something rather usual.

-Interviewer: *"Is everyone responsible for identifying knowledge gaps or what knowledge is available within the company in order for the job to be done?"*

-George: *"Yes, yes, in essence, everyone is doing this because we are not the 'mama' company with frequent seminars, meetings at the end of every month. We are not a multinational company where all gather together and plan, we are a family business and we do such things a little more loosely."*

On the contrary, some owners (Int:8, Int:13) reported that some of their employees are unwilling to put themselves into the process of knowledge identification at a personal level. Such employees are indifferent to learning and personal development, and they do nothing on their own initiative, unless it is imposed on them by their employer. For instance, Alex, the co-owner-manager of SER-MICRO-FCOM4 reported that not all employees are willing to take initiatives in order to acquire the required knowledge and skills. He told a narrative where one employee, who had excellent communicative 'soft skills', was reluctant to develop basic computer skills. As Alex put it:

"I have an employee who is very good at speech management. He managed to make many customers almost friends. But it would take him all afternoon in order to compile a document [on the computer]."

What is apparent from this narrative, from the owner's point of view, is that this kind of tacit knowledge is very important for the organisation, and the employee as a holder of this tacit knowledge can buy his way out of his computer illiteracy by showing indifference, without fear of losing his job.

Coping with demands and problems

All interviewees in their answers included elements of learning. Owners, managers and employees seem to converge that learning in its widest sense (e.g. continuous updating, informing, studying, learning by doing and understanding) is a key element for dealing with demands and problems. Beyond this broad generalisation, each interviewee provided their view with distinct differentiations and nuances, inviting interpretation. These views also reflect subjective dimensions in terms of the individual's life experiences, position and beliefs.

Learning by doing and learning from experience

Some interviewees put high emphasis on learning by doing and learning from experience and showed less appreciation of learning from seminars. They considered experience as the most valuable form of knowledge.

George, an employee of TR-SMALL-FCOM1, repeated that view, in a slightly different way, nine times during the interview. George's final words at the end of interview made it clear that experience is the most valuable form of knowledge:

"Yes, as I mentioned earlier in general, it is meant that any form of knowledge, even for us [as salespersons] which is not that [closely] associated with knowledge and innovations, is welcome and good for informing in order to deal with the market demands. However, I tell you that in my sector, on that particular job, I chiefly count on personal communication between us and the world, rather than on knowledge [explicit knowledge and knowledge from formal learning]. Knowledge is necessary, but it comes second as a priority. To me first and above all is experience [which is a form of knowledge as reported in other parts of the interview]."

In a similar vein, Mary, an employee of MF-MEDIUM-FCOM1, said that knowledge without experience is useless, and that knowledge simply broadens one's mind in order to understand faster and better things that they can learn by doing and experience anyway.

Learning by doing and learning from experience but not without continuous training

Some interviewees, although they acknowledge the value of learning by doing and learning from experience, they deem that training is mandatory for their business operation. Harry, the owner-director of TR-MEDIUM-FCOM1, based on his own long-life experience, reported that, due to lack of training, soon after he undertook his duties as director, made a lot of mistakes that cost him dearly. He considers that it is not possible for someone to work without training. In particular, new employees are trained systematically by inter-organisational trainers on a theoretical and practical basis.

Kate, a manager of SER-MICRO-COM1, reported that seminars are inextricably linked to their work, because the latter is associated with new technologies. In Kate's company, they are in continuous pursuit of knowledge within a rapidly changing environment. Kate also attributes this intense training with seminars on the growth-oriented policy of the company during the last years, and to the fact that they have new co-operations and new clients. Some of the seminars require natural attendance but most of them do not, for they are electronic seminars. The following excerpt shows exactly how strongly Kate feels about training and learning from seminars.

-Interviewer: *"How do training and learning help you and the organisation?"*

-Kate: *"Without them [seminars] I could not have done…, we could not be anything; we would not be who we are."*

-Interviewer: *"What is the impact on your job?"*

-Kate: *"One hundred percent."*

4.2.2 Knowledge acquisition/creation

All interviewees reported some tools which are enablers for knowledge acquisition/creation. Discussions, meetings and brainstorming are the most frequent tools used by all organisations. Beyond these tools, each company applies additional tools such as market surveys, external consultants, communities of practice, knowledge circles, learning from seminars, experimentation, IT tools, visiting local international fairs, corporations with Academic Technological Institutions and open space structure, based on preferences, beliefs and criteria as reported by the interviewees. None of the interviewees asserted formal knowledge acquisition and creation process. Nonetheless, there are distinct differences in terms of how the leadership of each company and the employees perceive the need for knowledge creation and how they implement initiatives in practice. These different approaches to knowledge acquisition/creation, mainly stem from a variety of subjectivities which are informed by experiential learning, mental models, emotional attachments (especially in family businesses), the nature of the organisation (internal push factors or driving forces) and external mechanisms as requirements for dealing with competitors. These internal and external requirements can be seen as push factors or driving forces of a political nature ('the power to'), which subsequently discourage power relations and enhances social capital. The following sections describe how knowledge acquisition/creation is perceived and practised by the basic actors.

Knowledge creation is important, but it is mainly the owner's responsibility

In some family businesses (Int:2, Int:10 and Int:17) the challenge of knowledge creation is something the owner-director takes on personally, along with the other family members in the company. This type of ownership and leadership concentrates all information inside their head. The owner is fully aware of the positive relationship between learning (in the wide sense of the term and as the owner subjectively believes what kind of activities will bring about learning) and creativity, and they are in a continuous process of acquiring

personal mastery. They usually achieve this by continuous learning by doing, experimentation, using the internet (WWW), reading from authentic sources, visiting international fairs and they do not hesitate to use external consultants, such as knowledge brokers and knowledge scouts. They also consider it important to locate and capture valuable knowledge within the organisation from family mentors, occasionally from employees who have specialised knowledge, and more importantly from the customers themselves through personal contacts. Such owners-directors mainly believe that the sources of knowledge creation are outside the organisation and therefore they prefer to have personal involvement as much as possible.

Anna for instance, the owner-director of MF-MICRO-FCOM1, when it comes to creation of new knowledge and innovation (e.g. the development of a new product) works secretly. New ideas are only discussed with family members and trustworthy family mentors. Anna gave an example: as an innovator of a new product, some competitors once tried to copy the original product and this resulted in bad imitations. Moreover, as a micro manufacturing company with low-education and low skill personnel, there is no necessity or benefit for the latter to get involved in a knowledge creation process. Anna recognises her management style as autocratic, and though she works long hours, sometimes she finds herself overwhelmingly overloaded with too many responsibilities. However, Anna believes that the processes of knowledge identification and knowledge creation require her personal involvement and secrecy within the family context. Here is a brief extract, as she put it:

"No, we are. Rather I am. I am a little…, I work secretly; and that makes me distinct in the market in my field. In that, I am she who creates new products…"

Likewise John, a manager of MF-MEDIUM-FCOM2, said that the owner-director acts as the company's information repository. The owner-director concentrates and filters information and ideas before sharing them with the personnel. There is no organised knowledge creation process and the owner-manager is responsible for knowledge creation. That is, though there is a centralised management, the owner-manager occasionally involves non-family personnel in brainstorming and meeting especially for problem solving. John believes that knowledge creation would benefit from employee interaction and direct knowledge sharing between different departments (e.g. between the production department and the trade department). However, the owner-general manager

prevents the direct relationships between the different departments. The owner-general manager is the absolute receiver, who collects and filters pieces of knowledge or information from everyone individually that enable him to ponder on knowledge creation and decision-making.

Approach to Knowledge creation: Collective, Bottom-up, and Top-down

Most of the interviewees reported that the approach to knowledge creation is either introduced by the owner/top management (top-down) or initiated by the base of the organisation (bottom-up). Some interviewees reported a top-down approach, and only one interviewee reported a bottom-up approach. It was interesting that some interviewees reported that in their organisation the approach to knowledge creation is a collective effort (Int:4, Int:5, Int:6 and Int:11 all non-family companies) and all the members of the company (or in some cases all the members of a particular department) are encouraged to participate. They deem that knowledge creation is teamwork, and they prefer to use the word 'team' instead of subordinates or employees. A characteristic exemplar of an owner who encourages this approach is Michael of TR-MICRO-COM1, a professional with post-graduate studies in business administration. Michael avoids using the word employee. When there is a need to talk about his personnel, he uses the word (συνεργάτες) co-workers. Michael considers that the sources of knowledge creation derive from both sides externally and internally. Therefore, he applies tools and methods to both directions. Internally, Michael believes that knowledge creation is mainly supported by team spirit and collective effort. Externally, knowledge creation and innovation is mainly supported by consultants, learning from seminars, communities of practice and from the customers in the course of daily activities.

Similarly, Leonidas, the owner-director of SER-MICRO-COM3, reported that the collective approach to knowledge creation is in fact imposed by the nature of the job. That is, their organisation provides project-based external services which presuppose health and safety measures during their execution. Every project is unique, and they ought to be innovative and inventive in most cases.

The fact that within the same organisation (medium in size) the different departments shape the knowledge creation approach according to the nature of their work is made clear by Nick, an employee of SER-MEDIUM-COM1. Nick said that the nature of work

in his department favours teamwork, while in some other departments /sections (e.g. sales department) employees are encouraged to work individually.

Knowledge creation is important but there are problems for its implementation

Some interviewees reported that knowledge creation, which is associated with innovation, is very important, perhaps the most important target for their company. However, due to financial restraints and the prolonged economic crisis, such objectives constitute wishful thinking and therefore remain in suspension, or in the best case they are implemented at a lower level. For instance Harry, the owner-director of TR-MEDIUM-FCOM1, one of the companies that have been affected negatively by the economic crisis, said that the general environment, characterised by complete uncertainty, does not provide the right conditions for planning, budgeting, growth and investments in knowledge creation and innovation. During 'normal' times (that is before the economic crisis) Harry said that knowledge creation and innovation was a continuous process. In the current circumstances though he recognises that 'there is an absolute need for the company to create new knowledge in order to move forward', they continue their efforts without a budget. As Harry put it, their focus shifted from growth to survival.

In a similar vein, Andrew, the owner of SER-MICRO-COM2 said that he had plans and ideas for innovative products, but all these require growth and investments which are difficult to achieve in the midst of the economic crisis. Here is a characteristic extract from Andrew's interview.

-Interviewer: *"Do you seek innovation?"*

-Andrew: *"Yes, yes, but it is difficult to implement it in our sector, we cannot grow. Innovation is about finding something new, it demands research and design…"*

Nevertheless, not all interviewees had a narrow definition of knowledge creation and innovation which is associated exclusively with the development of a new product requiring scientific research and design. Some interviewees saw knowledge creation and innovation in relation to their business field in a broader sense. For instance, Michael of TR-MICRO-COM1 said that innovation is very important for his business, not only in terms of the quality of the products but also, inter alia, in terms of procedures, offered services, policies, technologies and networks. As Michael put it, in one sense 'Fifty

percent is the quality of the product and fifty percent is the way you offer that product.' In fact, this broad approach interprets innovation as the implementation of any idea that can be beneficial to the organisation and its stakeholders. For instance, Michael is a member of a network of knowledge and corporation. The network provides external advisors, technical support, (e.g. management software), customer feedback via 'mystery shopping' and organises campaigns and events. Another example of an innovative policy relates to how the organisation communicates to customers information/ knowledge regarding the products, without using specialised terminology or scientific language. Such explanations are framed with the appropriate soft skills and behaviour based on kindness, patience and persistence. Moreover, Michael considers as innovative new ways to deal with trade policies in the midst of an economic crisis, in order to facilitate the transaction processes with customers.

Innovation is not that important

Three employees reported that creativity and innovation are not that important in their job and organisation. George, an employee of TR-SMALL-FCOM1, and Demy, an employee of TR-MEDIUM-COM2, both salespersons, reported that innovation has a very limited application in their job and organisation, because of the nature of their job and the scope of their organisation. The following passage shows how George put it.

-Interviewer: *"Are you not that interested in innovation?"*

-George: *"There is no innovation, that is, in our organisation it is a matter of plain trade, therefore being innovative is simply to know that a product is unique, not available in the market and you can become the exclusive agent of that product. However, it is important to implement initiatives through sharing practices so as to maximise the use of existing knowledge (efficiency seekers). It characterises our company quite a lot."*

Likewise, Markos, an employee of SER-SMALL-COM2, reported that the nature of the provided services as such and the legal conditions of the provided services leave little room for innovations. In addition, Markos implied that the company has outsourced some technical issues associated with innovation.

Learning from seminars and schools

Most of the interviewees from the manufacturing sector reported that seminars and learning in class is something rare or not applicable. Moreover, the interviewees who attended such seminars said that they had little or hardly any benefit from them. On the contrary, almost all the interviewees from the service sector and the trade sector reported that they attend seminars often, very often and sometimes intensively (chiefly those in the service sector). In addition, almost all acknowledged that seminars have made a positive effect on their work and only one interviewee from each sector reported little effect. Knowledge diffusion is generally taking place within the organisations after attending a seminar or training. Knowledge diffusion is not taking place in cases where the seminars are tailored to cover someone's personal gaps or needs and where all the members of the department or organisation attend the same seminar. A characteristic example that shows that learning from seminars is a tool for knowledge creation comes from Jack, a manager of SER-MEDIUM-COM2:

"You may achieve something even based on one idea (derived from a seminar) that is applied in practice. A seminar is always helpful. It makes you think of the problem as a third party and this is helpful…

Not only do the members of the company discuss what they have learned from seminars, but also it is also important that we expect them to propose new techniques."

4.2.3 Knowledge Storage

The interviewees mentioned a wide range of knowledge tools, from simple storage applications to highly sophisticated storage applications, usually under the supervision and maintenance of an IT department. The chosen knowledge tools are tailored to the company's needs according to the owner's/top-management's appreciation. The research revealed the scepticism by some interviewees and some underlying forces that shape the policy of knowledge storage within the organisations. These different perspectives and policies on knowledge storage mainly stem from a variety of subjectivities which are informed by experiential learning, mental models, emotional attachments (especially in family businesses), the nature of the organisation and work and generally the owner's capability for making situated judgments. The latter is responsible for finding the balance between different policies and conflicting interests. Knowledge storage is influenced by inadequate or low-quality knowledge sharing, which is underpinned by knowledge

hoarding/hiding based on the adage 'knowledge is power'. The following sections unfold in detail the different perceptions and practices on knowledge storage.

Knowledge storage exclusively for the owners

Some micro enterprises (e.g. MF-MICRO-FCOM2, TR-MICRO-COM2 and MF-MICRO-FCOM1) reported that knowledge storage is only for the owner's use, while the employees have no access to such systems. One reason for choosing this approach is founded on the fact that their company operates mainly with low-educated workers who simply execute their labour according to their experience and the owner's rules and work instructions. In some cases, (usually in larger than micro enterprises e.g. MF-MEDIUM-FCOM1) this approach is blunted, and knowledge storage is accessible by the owners and selective administrative personnel. In these organisations, the general personnel have none to low level computer skills.

Another reason against knowledge storage is a previous bad experience, that is, when someone had taken advantage of confidential knowledge which was kept in a system (e.g. TR-MICRO-COM2). Moreover, as these cases refer to some micro companies, the owners maintain that because of the size of their company they can still manage without codifying and knowledge storage. Nevertheless, they admit that, if the company expands, it would be difficult for them to manage without the appropriate knowledge codification and storage.

Knowledge storage for all the members of the organisation after securing the sensitive issues.

Some interviewees (John, a manager from MF-MEDIUM-FCOM2) reported that their organisation maintains some kind of knowledge storage system and all the members of the organisation have access to it. However, some areas are considered confidential or secret and therefore the accessibility is limited to the owners or other authorised persons. The separation between accessible and not accessible knowledge is a prerequisite for a knowledge storage system. Leakages of confidential knowledge/information to competitors or other persons that might harm the company is always a constant fear for the owner businessman. However, defining what knowledge should be confidential and what knowledge should not be, is not always that easy. Beyond that, sometimes it is not clear who should know what, and how everyone can contribute to the knowledge pool.

That is, knowledge storage is not part of an integrated KM approach and therefore is undermined by the lack of other KM processes such as knowledge identification and knowledge sharing. In addition, as John, a manager from MF-MEDIUM-FCOM2 reported, sometimes knowledge storage is impeded by false assumptions or unfounded excuses, such as that knowledge storage is always a costly process, or that is time-consuming, or because of ignorance of using simple IT tools. A short narrative was given by John as to how he convinced his subordinates to use email instead of informal personal contacts. By this way, John managed to have a recorded historical archive of questions, answers and solutions to problems and issues on a daily basis. John realised that the employees' resistance to this change was due to their ignorance on how to use email applications. Finally, John went through this change successfully and now the employees cannot imagine their lives without email.

Family links shape the knowledge storage policy and KM in general

In some family enterprises, the knowledge storage policy is highly influenced by the owner's beliefs in terms of how they will ensure that their own knowledge will be passed on securely to their successors. In other words, some owners, as the knowledge repository of their company, share their knowledge with their children and maintain a balance between how much and what knowledge to codify. The dilemma is between codification which endangers confidentiality, and non-codification which includes a risk of knowledge loss. A typical example of this attitude comes from Harry, the owner-director of TR-MEDIUM-FCOM1. Here is an extract from the interview:

"A great part of knowledge can be codified. If I had a non-family business, or if I had no successors, or if I wanted to make it [the knowledge] worthy, or to make it available somewhere else, I would codify it or I would convey it personally. Because, unfortunately it is an element which is physically in my own head. That is to say, there is a risk. I transfer this knowledge to my children."

Moreover, Harry argues that his decision and policy on knowledge storage and knowledge codification is not emotionally driven by the fact that he has a family business and children to transfer his knowledge to. He deems that a cost-benefit analysis would indicate that a full codification process and unconditional knowledge storage is a risky and costly process under the current circumstances internally and externally. In addition, he believes that some knowledge can never be codified, for it is being internalised

gradually as experiential tacit knowledge in a sequence of situated historical events and human interaction. This kind of knowledge is an asset for the organisation and resides in the heads of the employees. Here is an extract of how Harry makes his point clear:

"Okay, to some extent knowledge is an asset. It is an asset and there is a big risk. The biggest asset that we want to protect is our employees who bear this knowledge, this is their value, when they decide to go out to sell these valuable pieces of knowledge…
Surely, there is always a risk that this specific asset [knowledge] may be leaked and used by someone who we do not want, because it is of great value."

The thought experiment: When codified stored knowledge is more important than the personnel

The researcher asked the interviewees to discuss two hypothetical scenarios. This thought experiment was presented as Case 1 and Case 2 as follows:

Case1 - Let us say that one day for some reason the firm loses all its employees and the owner has to recruit new employees with the same typical qualifications.

Case 2 -The firm, all of a sudden loses whatever is documented in readable accessible form, and the owner, supported by the employees, has to restore the firm's memory.

Which case do you think would be more destructive to the firm?

Most interviewees reported that it would be more destructive if the company lost all its personnel at once instead of losing the codified stored knowledge. However, a few interviewees (Int:6, Int:12, Int:13, Int:16, Int:17 and Int:20) said the opposite. The provided justifications by these interviewees refer to the nature of the business, which is highly dependent on codified knowledge and/or that the personnel are relatively easily replaceable. For instance, SER-MEDIUM-COM1 is an organisation which is highly dependent on its knowledge storage. This organisation has available an IT department, whose main task is to prevent such a catastrophic scenario. They use advanced technological methods and the personnel exercise regularly on hypothetical catastrophic scenarios. Moreover, this company during the period of the crisis reduced its personnel significantly, invested in automations (standard procedures and codification processes) and applied outsourcing policy to some extent. Micro and small companies without an IT department apply simple backup methods.

Nick, an employee of SER-MEDIUM-COM1, a company with an organised knowledge storage and codification system, justified why the second scenario is worse. Nick also said that, because of the organised codified knowledge, the first scenario would be less painful to the company. In his own words:

"Because it is impossible to regain the stored digital knowledge from the time the company was established X years ago… This is a big damage and there is no human brain able to store all this [information]."

In the following extract Thanos, the co-owner-director of TR-MICRO-COM2 justifies why the second scenario would be more destructive than the first scenario to his company:

"First and foremost, I believe that nobody is irreplaceable. No one is irreplaceable and secondly, we, the co-owners, the heads of this company let us say, can do all the jobs."

According to Thanos, important parts of knowledge are kept on Universal Serial Bus (USB) sticks as backups for safety. The loss of those backups would bring the organisation in a dire situation, from which it would take some time to recover. The difference with the previous case is that the value of this codified knowledge is not dependent on the volume of information, but rather on the subjective value for the owner, as the secrets of the organisation. In addition, the employees are easily replaceable, not because the company has available an organised codified knowledge system that enables easy substitutions (as in the previous case), but rather because the owners are in position to substitute the personnel and operate their micro company until they recruit new employees.

In some micro enterprises, (e.g. MF-MICRO-FCOM1), even with very limited digital codified knowledge, the loss of a collection of information in paper form, which had been collected for years by the owner, seems to be considered more critical than the loss of the employees. In this micro company, the owner is the knowledge repository. The owner holds in his mind all the critical knowledge and know-how. To put it differently, such codified knowledge has emotional value for the owner and its loss outweighs the loss of employees who can be substituted easily by others without the need for them to have particular skills.

This last case in this section is particularly interesting, for the two scenarios are true stories. Theo, the co-owner-general manager of MF-SMALL-FCOM2, said that both scenarios happened to his company and that they managed to survive both. However, the

second scenario proved to be more destructive and painful than the first one. Theo described how the two scenarios occurred in reality and ended his narrative by talking about how painful the second scenario was:

"…They took the servers and the backups, they took everything and in essence we became 'crippled' because the next day we had orders for products and we did not know how to do it … the second [scenario], because the loss of prescriptions of the products is like losing your legs."

The thought experiment: When personnel is more important than the company's codified knowledge

Most interviewees said that it would be less painful to lose their codified knowledge instead of their personnel. The general justification (e.g. Michael, the owner-director of TR-MICRO-COM1 and Paul, an employee of SER-SMALL-COM1) suggests that people are more important than systems. A sudden loss of the personnel in an organisation functioning well would have also meant the loss of a culture and the loss of established relationships, things that take time and effort to develop. Another justification that supports this scenario is associated with the fact that the organisation is highly dependent on its personnel's know-how and tacit knowledge which resides in people's minds. Sometimes this tacit knowledge is associated with a person's special talent, or a capacity in a job, and when that person leaves the company loses these capabilities (e.g. Nestor, co-owner-manager of MF-MICRO-FCOM 3). None of the interviewees from the trade sector supported the second scenario. Interviewees from the trade sector supported that their job chiefly depends on the human factor and human relationships and therefore codification becomes less important. Here is how George, an employee of TR-SMALL-FCOM, put it:

"Well, then, I will tell you. Because in general in the sales sector interpersonal relationships play a fundamental role. That is, the Alpha and Omega is the personal relationship between sales employees and their customers. It is more than clear that it would be more destructive to the company to lose its entire personnel who have strived for years and have built a particular relationship with customers and [the company] relies on that."

Some organisations that invest on their employees' learning and/or the longevity of the personnel justified the first scenario. For instance, Andrew, the owner-director of SER-

MICRO-COM2, said that the loss of the personnel would be a step backwards because he would have to train them [personnel] all over again, in order to find their rhythm again, whereas losing existing information, existing clientele or everything else, is something he could recover from easily.

However, some interviewees acknowledged that the first scenario would be more destructive because their company had inadequate storage knowledge (codified knowledge). Here is an extract of how John, a manager of MF-MEDIUM-FCOM1, answered the question of why the first scenario was worse:

"I will tell you. Well, the first scenario, because, [as] the organisation has not made provision to have storage knowledge, it is highly dependent on each person's knowledge. So, this means that when someone leaves the company, [and] is replaced by someone else with the same formal qualifications, the gap is not filled. That is to say, this is a replacement of natural presence. However, the loss of knowledge within the company has not been replaced ..."

Not all the interviewees seem to fully agree with the previous statement. One interviewee (Harry, the owner-director of TR-MEDIUM-FCOM1) asserted that, even with an adequate codification system, replacing all the people of the organisation still remains a more difficult scenario than restoring the firm's memory. First, because it is impossible for someone to internalise at once all the pieces of knowledge and information by reading say a manual with many pages. Second, it is more difficult or even impossible for the new employees (Case 1) to regain the previous experiential tacit knowledge which was built gradually as a sequence of historical events, even if they had in hand some kind of description. Third, some pieces of information/knowledge cannot be codified and reside in people's heads because they admit little or no codification, due to security and/or confidential reasons. Last but not least, this organisation invests on people's learning and training and considers its employees its biggest asset which they want to protect.

4.2.4 Knowledge sharing

All the interviewees reported that generally knowledge sharing is taking place in their organisations. Nevertheless, none of them referred to knowledge sharing as part of an integrated formal KM system. In some cases, knowledge sharing is practised instinctively as an inextricable part of human relationships among the members of the organisation,

and in other cases it is not without a second thought. Most participants were also in a position to explain the deeper impetus to knowledge sharing and reported why the people in their organisations willingly or unwillingly share their knowledge. The following sections reveal the complex nature of knowledge sharing as an activity which is conditioned to a considerable extent by subjective, social and political factors. The idiosyncratic nature of knowledge sharing is manifested in a variety of subjectivities which are informed by experiential learning, mental models, emotional attachments (especially in family businesses), the nature of the organisation, the structure of the organisation, the nature of business, the culture of the organisation and generally the owner's capability for making situated judgments. The relational-social dimension of knowledge sharing is highly valued by the majority of owner-managers, and therefore they intervene proactively and actively in order to create a knowledge sharing culture within the organisation. However, when all efforts fail, some participants reported that knowledge sharing is imposed by force at the owner's demand.

Knowledge sharing is shaped by the nature of business

There are some enterprises in which the nature of work as such promotes and presupposes the building of team spirit and friendship between the members of the organisation, and therefore knowledge sharing comes naturally. In this kind of company, the members of the organisation provide services which require health and safety measures and collaboration. In such a company, the members of the organisation are friends first and colleagues second. The approach to work is different due to the difficult conditions. Such conditions enforce the staff to establish strong bonds between them because many times their life depends on one another. In other words, the nature of work as such cultivates strong relationships and ties. Leonidas, the owner-director of SER-MICRO-COM3, expressed it nicely:

"Other organisations do the so-called 'team building' by using the techniques of a group. That is, going rafting together or doing other outdoor group activities in nature in order to enhance their team bonds. We do this naturally on the job [laughs]…

… I would say it is a business of friends [laughs]."

Knowledge sharing is shaped by the structure of the organisation

According to Markos, an employee of SER-SMALL-COM2, the organisation's top-management shapes a working environment which does not encourage competitive and

careerist behaviour between employees (e.g. flat management, very low power distance and same salaries). In other words, there are no incentives for climbing or salary raises. Markos believes that this is a decisive factor that explains why the employees generally share their knowledge willingly. There are only occasional exceptions to the rule and these simply reflect the character of the person who does it. Likewise Thanos, the co-owner-director of TR-MICRO-COM2, said that there is no competition between the employees because of the size of the company. That is, in every section of the company there is only one employee. However, Thanos also asserted that knowledge sharing is also imposed by the owner. The employees share their knowledge in order to satisfy their boss, or in order to complete a job. They are not willing to share their knowledge because they espouse the saying 'knowledge is power'.

Knowledge sharing is imposed by the owner

Some interviewees said that knowledge sharing is imposed by the owner in different ways. Alex, the co-owner-manager of SER-MICRO-FCOM4 said that he reprimands his employees when they do not share their knowledge. He acknowledges that the main impediment in knowledge sharing is antagonism between employees, and that they share their knowledge up to a point. Therefore, sometimes knowledge sharing is imposed by force at the owner's demand. Thanos, the co-owner-director of TR-MICRO-COM2, said that he explains the policy of knowledge sharing to prospective employees before they are hired. In other words, Thanos resembles a coach who choses players (employees) in order to build his own team. Thanos revealed that the employees share their knowledge in order to satisfy their boss and in order to complete a job. In the same vein, George, an employee, of TR-SMALL-FCOM1 said that:

"You share knowledge not because you feel obliged towards your colleagues but because you feel obliged towards your owner-manager."

Moreover, Thanos acknowledged, judging also from himself, that employees share only part of their knowledge. That is, what he used to do when he was himself an employee. He shared knowledge to the extent (no more and no less) that this was enough to keep the boss satisfied and get the job done. Therefore, the saying 'knowledge is power' is applied. Now from the vantage position of being a co-owner-director, he does not expect more from his employees. Consequently, knowledge sharing is a matter of compliance with the owner's tolerance to accept that knowledge hoarding does not cause apparent problems to the organisation.

Birds of a feather flock together

Some owners of micro enterprises asserted that they choose the people to work with them as members of their team. It is expected that the people who are willing to join the organisation espouse the same principles and culture in the same way as these have been adopted by the owners. Such organisational cultures highly value team spirit, knowledge sharing, personal mastery, fairness and an environment which inspires comfort, confidence and job security. A characteristic exemplar of that organisation comes from Nestor, the co-owner-manager of MF-MICRO-FCOM3 who succeeded the older generation of a family business. Nestor believes that people share their knowledge when they feel secure, and they do not share their knowledge when they feel insecure. Consequently, Nestor likens his company to a group of people who all endeavour to achieve the best possible result. It is important to note that during the interview Nestor never used the word 'employee/s' (in Greek 'υπάλληλος' which etymologically denotes subordination). When it was necessary to refer to his personnel he used the word 'people' or 'co-workers'. His language during the interview had a collective tone by putting stress on 'we', on 'collaboration', 'co-operation' and 'team spirit'. A typified expression is 'We are all one team'. Hence, Nestor considers his company as a group of people who willingly collaborate in order to achieve their common ends. When it comes to knowledge sharing as Nestor put it: *"The people not only share their knowledge, but they also justify why they do so…"*

Similarly, Lucas, the owner-director of MF-MICRO-FCOM2 reported that the employees share their knowledge because they understand that this is a presupposition to working in the company. Persons who do not share their knowledge are not suitable for the company. Especially if that person is the supervisor of a team. There are many reasons why some persons are not willing to share their knowledge. The most important is how the people fit into the team. Hence, one of the most important abilities of the owner according to Lukas is to recruit people who have the appropriate character to work collaboratively as a team. The wrong choice of people can bring about problems to the team spirit and to knowledge sharing.

The role of position in Knowledge sharing through the eyes of some employees

Some interviewees (employees) reported that they cannot see the difference and that knowledge sharing depends on the person's character. Others reported that their superiors

e.g. owner-managers appear to be more reluctant in knowledge sharing. For instance, the owner-manager is reluctant to share her/his knowledge or details of all their thoughts, especially those which might be considered secrets. The following passage shows how George, an employee of TR-SMALL-FCOM1 answered the relevant question.

-Interviewer: *"Does the owner-manager share her knowledge easily?"*

-George: *"Heeee…ummm… not very easily [laughs]."*

Some other interviewees reported some interesting observations. Nick, an employee of SER-MEDIUM-COM1, said that people in a high position sometimes share their knowledge less willingly, although they tend to encourage others to share their own knowledge, because this is imposed by the company's principles. People in positions where their results depend on teamwork are more willing to share their knowledge with their subordinates. In other words, managers who are in charge of people working in groups are more willing to share their knowledge. While managers who are in charge of people working individually are less willing to share their knowledge. Paul, an employee of SER-SMALL-COM1, observed that knowledge sharing among staff members of the same level flows more naturally. On the contrary, knowledge sharing between senior managers and employees is rather rare, because the former are more reluctant to do so. Moreover, Paul added that knowledge sharing between a manager and an employee is sometimes subjective, in the sense that a manager is willing or motivated to share their personal knowledge and expertise with an employee when they like and respect each other.

Knowledge is power, job insecurity and antagonism within the organisation are the main impediments of knowledge sharing

The belief that knowledge is power in the sense of knowledge hoarding for someone to retain or gain some kind of advantage, job insecurity and competitiveness/antagonism are the main impediments of knowledge sharing according to most interviewees. Most of the interviewees reported that the owners share their knowledge in order to urge the personnel to do the same. However, some owners believe that there is no solution to the problem of antagonism, beyond refraining from fomenting such antagonistic behaviour within the organisation. Perhaps, according to Harry, the owner-director of TR-MEDIUM-FCOM1, in organisations, owners avoid discussing different opinions, contradictions, conflicts and

inequalities with reference to qualifications and skills, because these are sensitive issues that can offend the personnel.

The level of seriousness of KM impediments varies from company to company. According to Mary, an employee of MF-MEDIUM-FCOM1, knowledge sharing in the organisation is impeded by antagonism, which is the effect of a complex frame of causes. First, the owner does not facilitate knowledge sharing by encouraging dialogue, informal ways of communication, collaboration and empathy; instead, he puts high emphasis on adherence to regulations and policies. The owner is strict and shows his discontent when he sees employees chatting to one another, especially in groups. In other words, in Mary's organisation the personnel do not have emotional commitment between them. By contrast, Michael the owner-director of TR-MICRO-COM1, fervently believes that knowledge sharing is encouraged when the personnel build emotional ties between them and with the company. Second, Mary considers that not all the responsibility for sharing knowledge and develop team spirit should rest on the owner's shoulders. The organisation consists of people with low educational level who acquired their skills from experience, and they feel insecure when they share their knowledge. In most cases knowledge sharing is taking place in order to get the job done for personal benefit. Consequently, as long as everyone in the organisation is judged by the result, people are obliged to share their knowledge when asked to do so, but they take care not to reveal their knowledge. In other words, they prefer to do the other's job without explaining how they did it. In fact, Mary describes an example of how knowledge hiding is taking place within organisations. Knowledge hiding is an intentional response to conceal knowledge that has been requested by another individual. The following extract is characteristic of how Mary makes her point clear:

"For instance, if I asked for something [to be fixed], someone would come and fix it in my office. They would not tell me how they did it. I have to find out by myself, because if I learn more than they, they might find themselves without a job, there is a stupid antagonism."

Bad experiences influence a person's knowledge sharing attitude
Some interviewees revealed that after having a bad experience in knowledge sharing they reconsidered their attitude towards it. That is, they became more cautious and sceptical, or even suspicious as to who they share their knowledge with and therefore, they share

their knowledge up to a point (selective knowledge sharing). A characteristic example of an employee who has been influenced by previous unfair experiences concerning knowledge sharing is Markos, an employee of SER-SMALL-COM2. Here is how he put it:

"Yes, I am little cautious [concerning knowledge sharing]. There are persons with whom I share my knowledge and expertise without thinking. I know that there are some persons who can exploit what I say[knowledge]in a way I cannot predict. In such a case, I am cautious. I was [once] forced to defend my expertise to top-management when I heard things I said, as a piece of advice, five minutes before to a colleague who had used my words as they were his own."

Likewise, Thanos, the co-owner-director of TR-MICRO-COM2 said that since he had some painful and unfair experiences from knowledge sharing, he shares his knowledge up to a point. In other words, knowledge sharing and qualified knowledge hoarding are two sides of the same coin. According to Thanos, qualified knowledge hoarding not only protects you from unfair treatment but also distinguishes you from others who know less.

Other interviewees reported that even after of a bad experience, they did not change their positive attitude towards knowledge sharing. These interviewees deem that knowledge sharing benefits outweigh any possible bad experiences such as, wasting time or failed investments, exploitation and other unfortunate cases. Such an example comes from Harry, the owner-director of TR-MEDIUM-FCOM1 who said that despite some painful experiences he will continue sharing his knowledge. Here is an excerpt of how he expressed it:

"Unfortunately, there is no alternative [knowledge sharing is a necessity]. This is known to risk management, in SWOT analysis these are threats, but what can we do?"

How often are owners and managers interrupted by the personnel in order to provide a piece of information or advice about how to do this or that?

Almost all owners and managers reported that they often are interrupted by their personnel and very often in order to give a piece of information or advice about something. In some cases, the respondents showed that they want to have overall control, or that they encourage such interruptions. Some interviewees stated that they are interrupted very often to the extent that this reaches the level of exaggeration. For

instance, the following passages are some of the answers to the question: 'How often might someone interrupt you asking for a piece of information or advice about how to do this or that?'

*"As often as the breaths I take." (*Michael, the owner-director of TR-MICRO-COM1)

*"Millions of times." (*Anna, the owner-director of MF-MICRO-COM1)

"Tens of times a day. This is something usually I ask for." (Jack, manager of SER-MEDIUM-COM2)

The explanation for such frequent interruptions according to Nestor, the co-owner-manager of MF-MICRO-FCOM3, stems from several causes, such as lack of knowledge, doubt, confirmation to mention a few. However, Nestor, as well as other owners do not see these intense interruptions as something to worry about. Even in the worst-case scenario, according to Nestor, these interruptions seem to reach equilibrium between positive and negative effects. Frequent interruptions might hinder productivity, but they are useful for avoiding mistakes.

The level of co-operative and teamwork spirit culture is lower in companies with low educational level on the part of most employees

Mary, an employee of MF-MEDIUM-FCOM1, reported that there is no co-operative and teamwork spirit culture within the company. She attributes that to the fact that the employees have a low educational level. Mary's company is a typical exemplar of a labour/capital-intensive organisation with low educational level on the part of most employees. Mary believes that people with degrees or educated people might feel antagonistically towards their colleagues but they lay aside such behaviours, for they can understand that unless they work collaboratively, the company will not get ahead. John, a manager of MF-MEDIUM-FCOM2, which is another labour/capital-intensive organisation of the same size, reported that the level of co-operative and teamwork spirit is at a tolerable level but there is always room for improvement. John implied that the tolerable level in his company is not that bad, taking into account Greek nature in general, which is antagonistic and problematic in co-operation. In other words, John also introduces a cultural element which designates individualistic behaviour. As John put it: "*Teamwork does not work very well, let us say, because everyone deems himself/herself to be unique.*"

The role of IT on employees' performance: up-skilling, de-skilling and monitoring

Beyond the contribution of IT in knowledge sharing most of the interviewees (except Int:15 and Int:18) reported that IT is used as a means to strengthen managerial power by monitoring employees' performance. Most of the interviewees (except Int:5, Int:14 Int:17, Int:18) reported that IT is also used as a way of empowerment and enhancement of employees (up-skilling). However, few interviewees reported that IT has a dual role in their companies. That is, in parallel with up-skilling, IT in some cases is used to reduce the power of employees by downgrading the level of practical knowledge-skills required in job descriptions, a process known as 'de-skilling' (Zuboff, 1988 in Gray 2001:371). John, a manager of MF-MEDIUM-FCOM2, explained that the two contradictory cases, up-skilling and de-skilling, are taking place in his company. For instance, de-skilling occurs when the execution of a process, which was dependent on someone who was its operator, can now be operated by someone else after they read and understand the written procedures. While up-skilling is taking place, when a person who works on something can have access to knowledge resources via IT. That will improve their capabilities and the quality of their work and finally that will be reflected in the whole operation of the company.

4.2.5 Use of Knowledge

Use of knowledge is the final activity in KM implementation and is concerned with the previous four activities pay off and add value. As Prat (2011) put it, in business organisations, knowledge draws its value from concrete application to business processes. Hence, this section refers to what extent the organisations have mechanisms to identify under-utilised knowledge, knowledge gaps and whether while applying knowledge they capture new experiences for the creation of new knowledge. The perception on knowledge use process and its implementation was shaped by subjectivities based on experiential learning, the size of the organisation, the lack of an integrated KM system, the nature of the organisation and mental models of a political and social nature. The main political objection or scepticism was the obsessive monitoring in order to restrict under-utilised knowledge raises power and control issues, which undermined employees' self-autonomy and knowledge creativity. The social dimension refers to the lack of communication and interpersonal relations between the different departments of the organisation, which are more likely to undermine efforts for effective knowledge use.

The research findings showed that SMEs use mainly personal contacts in order to put the available knowledge into practice action. Originally almost all interviewees (except John, Int:2) reported that they make productive and full use of possessed information and knowledge in their organisation. Some interviewees asserted that this is due to the relatively small number of employees and to the fact that they know one another very well. Likewise, some interviewees (e.g. Int:8), maintained that as owners they have the full control of their company and therefore are able to know their gaps in KM. Moreover, 'the confident', such as Mary, an employee of MF-MEDIUM-FCOM1, which is characterised by longevity in employment relationships and a gradual growth from a sole proprietor with few employees to a medium company, had an additional explanation. Mary reported that the employees in her organisation work empirically. That is, they have empirically learned whatever they need to know and nothing more. Whatever knowledge/skill they use is what they have learned empirically, hence nothing remains under-utilised. Kate, a manager of SER-MICRO-COM1, said that the nature of the company and the offered services make use of knowledge as part of the daily routine. In Kate's view, the use of knowledge is omnipresent in daily activities, for all activities deal with knowledge. The scope of the organisation is knowledge itself, which is also the offered product. Consequently, Kate understands the process of the use of knowledge as an inherent business operational activity and therefore, all the available knowledge is utilised productively. From Kate's point of view un-utilised knowledge would have meant operational dysfunction with immediate effects.

However, in the discussion process before the end of the interviews not all the interviewees were confident that important information, expertise, ideas and knowledge generally do not remain under-utilised. Some interviewees reconsidered their position pertaining to the organisation's capability to make effective use of knowledge when they acknowledged the existence of weaknesses and deficiencies. A characteristic problem was 'reinventing the wheel', that is, wasting time trying to find a way to do or create something, when someone else in the organisation has already done or created it. Nick, an employee of SER-MEDIUM-COM1, attributed the aforementioned problem to the human factor and the lack of communication and interpersonal relations between the different departments of the organisation. Additionally, John of MF-MEDIUM-FCOM2, stated that, generally, problems in the effective use of knowledge are due to the lack of an integrated KM system in the organisation.

The sceptics

Markos, an employee of SER-SMALL-COM2, acknowledged that operational dysfunctions indicate that some knowledge yet remains under-utilised and gave a descriptive example of how this is taking place in the organisation. In essence, Markos implied that the use of knowledge remains under-utilised because other KM processes (which are presuppositions of knowledge use), such as knowledge identification, knowledge acquisition and knowledge storage appear dysfunctional. Nestor, the co-owner-manager of MF-MICRO-FCOM3, revealed that, though it is not possible to fully know what knowledge remains under-utilised, they apply a systematic approach in order to make optimal use of knowledge. Hence, gaps of un-utilised knowledge appear whenever the company is unable to fulfil its aims at a certain level, or when the company is to reach a next level and there are emerging questions ahead. Then it is time for the company to find out whether there is under-utilised knowledge and/or lack of knowledge. Jack, a manager of SER-MEDIUM-COM2, asserted that it is not possible to fully know what knowledge remains under-utilised because it is a matter of monitoring without depressing the employees at regular intervals. The point according to Jack is self-autonomy, that is, letting the employees use their knowledge creatively.

4.2.6 The impact of the crisis on organisations and the role of KM

Most of the organisations, according to the interviewees, suffered the effects of the prolonged economic crisis and saw their amount of business falling dramatically. The main adjustments to the crisis were cuts and reductions in expenses and personnel respectively. Some interviewees also expressed their anger, disappointment, and concern about the continuing economic recession. Surviving the economic crisis remains the main issue for some companies which have been seriously affected (e.g. construction industry). On the contrary, some interviewees reported that during the economic recession they experienced growth in their companies in terms of revenues and personnel. Moreover, few interviewees saw the economic recession as a chance and challenge for new initiatives and changes concerning their business activities. Nevertheless, none of the interviewees reported the introduction of some kind of an integrated KM system or method as a means to face the consequences of the economic crisis. From the provided answers, one can distinguish only instances of partial application of KM practices. Such practices include continuous development and improvement of IT applications (internet, software and hardware), continuous training and information, automation of procedures

and acquisition of new knowledge (e.g. business accounting issues, bringing in new customers, broadening the range of the provided services and products).

Nevertheless, some interesting observations were made by some interviewees as 'lessons learned' due to economic the crisis that might affect their way of thinking regarding KM, quality systems and management in general. The first observation is that some owner-managers of SMEs (e.g. Antony the owner-general manager of TR-SMALL-FCOM 2) saw that in the period prior to the crisis there was an exaggeration of investment on facilities, personnel, consultants, policies and practices without return on investment, that resulted in minimum reserves. Such policies were not in the spirit of lean and cost-effective management, and brought in a dire position many of the companies since the emergence of the economic recession. In other words, Antony implied that the economic crisis forced them not only to reduce and cut their expenses, but also to adopt a lean organisational thinking that is sceptical of investment in domains without contributing benefits or return on investment. In the same vein, some interviewees (Int:4, Int:5, Int.:7, Int:9, Int:10 and Int:21) reported that they maintain organisational procedures without being certified (e.g. ISO 9000 quality management system). It is worth mentioning that neither the interviewees who reported that their organisation is ISO 9001 certified (Int:2, Int:6, Int:11, Int:12, Int:14, Int:15, Int:16) nor the others who reported that they are not certified were informed about the inclusion of KM in the new version of ISO 9001:2015 'Quality Management Systems-Requirements'.

Last but not least, the research findings do not support the claim that growth-oriented organisations are more apt to KM processes. However, those who reported that they were growth-oriented before the crisis and considered their growth management policy to some extent responsible for the crisis consequences became more sceptical about any potential investment including KM.

4.3 Summary

The analysis of findings showed that the five KM processes are practised mainly informally as emergent necessities of knowledge work, with the owner-manager being the motivator, the co-ordinator, the shaper and the reformer of organisational culture. The quality of KM processes is highly influenced by the subjectivities of the basic actors, which are informed from relational constructs of social interaction and power impulses.

Power impulses in the positive sense can be seen as driving forces or push factors ('the power to') that mediate the effects of power relations and encourage employment relationships and knowledge sharing. The main sources of these driving forces refer to external requirements of compliance, pressures of competitiveness and the nature of the organisation and work. This is not a one-way course of action. Subjectivities of basic actors, especially those of owner-managers, also shape the relational constructs, the culture of the organisation and power relations. Experiential learning, mental models and the capability of making situated judgments define to a large extent the subjectivities of owners, managers and employees. Owner-managers and employees implied that power requires knowledge and knowledge creates power. At personal level, both basic actors desire to acquire the 'power of expert' in order to improve their position either as the owner-manager or the employee of an organisation. Power as possession can be seen from the vantage point of the owner-manager to hire people of his/her choice that 'fit into the group'. People that 'fit into the group' are more likely to develop group/social identity, trust and care which are enabling factors for knowledge sharing. Power as a matter of exercise can be seen in everyday human interactions, and when the owner-manager is leading by example (e.g. by sharing his/her knowledge) or when she/he imposes knowledge sharing behaviour on employees. From the employee's point of view, power as possession refers to their tacit knowledge and skills that are difficult to imitate. Tacit knowledge remains a challenge and a conflict of interest between the individual and the organisation. SMEs have difficulties, or they cannot see the need, to develop sophisticated solutions, as their larger counterparts usually do, in order to transform tacit knowledge into explicit knowledge, if this is feasible, for the benefit of the organisation. In the main, KM is practised rather incidentally and informally, as separate parts of IT tools and activities contributing to the organisational operation.

Knowledge sharing differs from the rest four KM processes in the sense that it was acknowledged by all participants for its collective nature. In contrast, the other four processes, in some cases, were reduced to the personal level or the family level of the owner-manager being the sole implementer.

Chapter V

Discussion of findings

5.1 Introduction

Several findings and themes of this study are in accord with the literature review. First and foremost, Hutchinson and Quintas' (2008) argument that SMEs mainly use informal KM rather than formal KM processes is verified. That is, SMEs have their way to practise KM without referring to the concepts or terminology of KM. The emergent approach of KM was also identified, but with some differentiation from Bolisani et al.'s (2015) study, mainly in terms of the bottom-up characteristic. That is to say, KM solutions are not always developed by employees' initiative, subsequently validated and accepted by the management, especially when the latter refers to the owner-manager of a family business. In other words, an entirely bottom-up emergent approach of KM in family SMEs is rather unusual in the Greek context. However, there are indications that the emergent KM approach may be closer to the Greek reality either with partial or essential contribution/involvement of the owner-manager. This is congruent with the autocratic style of leadership, which mainly characterises Greek organisations (Psychogios, 2011) in conjunction with Sparrow's (2011) observation concerning the owner's attitudes and dispositions holding central position in shaping KM.

This general lack of understanding and practice of formal KM processes deprive enterprises of the potentiality to shape an integrated picture of KM and makes comparative analysis of enterprises more difficult. Based on the analysis of the five main processes of KM, the participants showed that their understanding and processes approximate the so-called first and second generation of KM. A characteristic exemplar of first generation approach mainly reduces KM in the investment on IT software applications, such as Customer Relationship Management (CRM) and data bases (e.g. Int.6 and Int. 10). In contrast, the findings that support the second generation KM shift the emphasis on networks of knowledge and communities of practice (e.g. Int. 5 and Int.13) Nevertheless, some of the enterprises showed signs of a transition to features that approach the philosophy of the third generation of KM. Enthusiastic, extroverted and chiefly educated young owner-managers, who took over the leadership of their micro family company, have the capacity to shape the culture of their organisation based on

teamwork, care and trust. Hence, the research findings supplement Rasheed's (2005) assertion concerning the role of the owner in small companies as a motivator of KM development by providing such a profile. The relatively small number of personnel, especially in micro enterprises, enables simple organisational structures which allow close ties between owners and personnel.

However, there are exceptions when micro organisations with a few employees remain highly owner-centric or family-centric. In such cases, the role of employees is more incidental than essential in OL and KM. Such organisations can be characterised as labour-intensive consisting of employees with low educational level. Hence, the findings of this research suggest that there are exceptions to the general view (Riege, 2005) that SMEs are associated with an environment which is conducive to generating knowledge. A claim justified by the small number of employees and their potentialities of closer social relationships, contributing to good communication flows and knowledge sharing (ibid).

A characteristic theme with a dominant role in SMEs relates to the owner-manager/director as the knowledge repository of the organisation (Desouza and Awazu, 2006) and company's most important source of capabilities and competencies (Wong and Aspinwall, 2004). Consequently, as Sparrow (2011) points out, the owner's attitudes and dispositions become central in shaping KM. Based on the findings, such owner-managers/directors refer to family businesses of first, second, third and even more generations, but also to non-family businesses of sole proprietorships or other forms of companies. The research reveals that there is no single attitude towards KM concerning the owner-manager/director with the aforementioned description. Although the owner-manager/director remains the dominant subjective factor in shaping a KM culture within the organisation, the approach to KM is also influenced by other internal and external factors (e.g. the nature of the organisation in terms of size, family or non-family business, labour-intensive or knowledge-intensive, naturally project-based provided services based on teamwork and the economic crisis). These factors in their positive sense create the conditions that are in favour of a supportive KM culture. In their negative sense, these factors are associated with subjectivities which hinder the development of a supportive KM culture. The specific constraints emanating from the shocks to the business system refer to financial constraints and the need for drastic solutions based on cuts and reductions in expenses and personnel respectively. Perhaps the most discouraging

constraint of economic crisis is that none of the participants acknowledged the development of an integrated KM system as a means to mediate its consequences. One explanation lies in the belief that KM systems are associated with larger organisations and considerable investments in IT solutions, that is, a remnant effect of the first-generation KM.

In fact, previous experiences concerning failures, mistakes and every kind of misfortune are capable of influencing decision-making and the general attitude of the owner-manager/director. In the same vein, some employees reported how bad experiences made them more cautious or more sceptical in knowledge sharing. In other words, experiential learning is to some extent responsible for the subjectivities (positive or negative, fair or unfair and enabling or hindering) that shape the KM processes. However, the dynamic of experiential learning varies at individual and organisational level. A narrow perspective of experiential learning is often associated with learning within the organisation and the immediate environment of the individual. This is mainly apparent at the level of employees. In contrast, owner-managers and managers manifest a broader perspective of experiential learning deriving from multiple sources beyond the organisation's immediate environment. Such sources encompass, but not exclusively, knowledge networks, communities of practice, personal contacts with customers/clients, suppliers, consultants, competitors and trading partners. In addition, some organisations (e.g. knowledge-intensive and those with constant changing tasks) show commitment in learning and find experiential learning important when it is supplemented regularly by formal learning. The main challenge for the owner-manager is to upgrade the experiential learning to organisational learning. The findings suggest that this is achieved, to some extent, from a constructive engagement of the members of an organisation in a continuous dialogue concerning their tasks. Nevertheless, OL is undermined by the failure to establish an integrated formal KM discourse. The latter provides a proactive dimension on OL and KM which supplements the reactive approach of experiential learning.

The findings revealed the intimate relationship between knowledge and power and the political nature of KM. The converse of the famous adage 'knowledge is power', that is, 'power is knowledge' was also verified when the owner-managers imposed their knowledge and interpretation on their employees. It is no exaggeration to recognise that KM is not only about the management of knowledge but also about the management of

the different expressions of power. The adage 'knowledge is power' and its drawn inference that 'the management of knowledge is the key to power' (Omotayo, 2015:2) is only partially correct. The findings also suggest that the management of power (more precisely, its different expressions) is the alternative key to the management of knowledge. However, this is not an unproblematic presupposition. Power is an elusive concept if we accept that power is a matter of exercise and an attribute of social relationships rather than a matter of possession (see p. 61, Chapter 2). In addition, it is generally accepted that power can be overt or hidden with varying degrees of manifestation. Last but not least, the findings make clear the role of practical wisdom in KM implementation, primarily for the owner-manager and secondarily for the personnel, as the ultimate regulator in decision making and the means of responding to everyday complex organisational demands. Hence, practical wisdom as a critical trait of someone's character to some extent overshadows the conflicting role of other personality traits, such as agreeableness, openness to experience, neuroticism, extraversion and conscientiousness, in KM processes. The discussion unfolds by approaching the phenomenon of KM in SMEs as a political game influenced by social dimensions, subjectivities and facts.

5.2 Political dimensions, social dimensions, subjectivities and facts

The analysis of findings showed that the KM processes are highly influenced by the interplay of political expressions between the owner-manager[3] and the employees. The political nature of KM starts with knowledge identification. It is perhaps no coincidence that all the interviewees (owners, managers and employees) acknowledge that knowledge identification begins at a personal level, for it is a necessary condition for someone being responsible in their job. That is, owner-managers and employees aim to acquire the 'knowledge of the expert' in order to improve their position. On the one side, this 'power to' expression of power is a legitimate desire, for it refers to the unique potential and right of every person to fulfil their aims. On the other side, when this 'power to' expression is overshadowed by the dictum 'knowledge is power' and turns into a 'power over' expression it is more likely to bring about conflicts and problems.

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[3] Due to the relatively small number of participants the findings do not support the claim that there are gender differences in terms of how the owner-managers perceive and practise KM.

For instance, one employee revealed that the owners took advantage of their position as employers and gave a disproportionate level of responsibility of knowledge identification to the personnel. In other words, some owners demand indirectly from their employees to find out and acquire the necessary knowledge in order to do their job. Consequently, they expect their employees to take initiatives and bear the cost of their learning and training. It is worth mentioning that previous surveys of the European Foundation for the Improvement of Living and Working Conditions (2007) showed that in Greece fewer than 20 per cent of workers receive training at work, while in Northern European counties the percentage is more than 50 per cent (Prouska, 2011:177).

In addition, some participants implied some other factors which intensify the power of the owner in this direction. First, due to the economic recession, most of the organisations were forced to make redundant a great percentage of their personnel. Hence, employees who remained live in fear of potential redundancy. They consider themselves vulnerable to the discretion of the owner and believe that may lose their job without good reason. Second, the employers have the chance to hire employees with skills and expertise due to the lay-offs and the dissolutions of several companies. Third, the owners, who reported that they apply reward systems for their personnel, take into account the contribution of the employee to organisational results. There is no reward concerning the contribution of the employee to KM. On the contrary, some owners described a different point of view which is associated with the employee's indifference in taking initiatives when it came to knowledge identification and personal learning for the benefit of the organisation. As one owner (Int:13) implied, this indifference is not that naïve. Put differently, some employees rely on their tacit knowledge, which is valuable for the organisation and not easily replaceable by other employees, in order to counterbalance/negotiate their gaps in other types of knowledge and skills. Hence, there is some kind of a tug of war between the owner-employer and the employee and both parties manifest with their own way the 'power over' expression.

Moreover, the value of tacit knowledge is also sometimes acknowledged by owners from two contradictory perspectives, for they should manage their own personal tacit knowledge and the tacit knowledge of their personnel. On the one hand, they encourage practices of social interaction for socialisation and externalisation of the personnel's tacit knowledge, on the other hand, the socialisation and externalisation of their tacit

knowledge is more a matter of special consideration. The first part of this finding in fact verifies Schreyoegg's and Geiger's (2002) observation that owners highly value the process of knowledge sharing within the company, for it can be a means to achieve competitive advantage, given the fact that tacit knowledge is difficult to be copied by competitors. The second part of this finding implies issues of power, control and insecurity. Owners and personnel know that tacit knowledge is also their own personal competitive advantage, not only relating to competitors but sometimes also between members of the organisation. This contradictory behaviour can be explained as power mismanagement. On the one side, the owner-manager recognises that neither her/his personal 'power to' nor any other's individually is sufficient for bringing about the organisational aims, and therefore she/he encourages knowledge sharing among the employees. On the other side, a low esteem of her/his knowledge and self-worth is manifested with 'power over' expression in the sense of knowledge hiding/hoarding. The findings suggest that such behaviours are easily perceived by employees and consequently undermine knowledge sharing by giving a negative exemplar. However, the smaller the number of employees, the flatter the organisational structure, and the owner's role to inspire team working, enable knowledge sharing and the socialisation process.

The transition from the personal level to the organisational level is far from straightforward, for primarily it requires the recognition of the social nature of knowledge by the owner-manager. Cook and Brown (1999) suggested the 'generative dance' between knowledge and knowing by recognising the equal contribution and necessity of explicit, tacit, individual and group knowledge. What brings about new knowledge and new ways of knowing relies on the interplay between knowledge and knowing. Knowledge as possession is a tool of knowing, the latter being an aspect of action, a manifestation of human interaction with social and physical world (ibid). Knowledge identification is a first step of collective action through the integration of the different forms and levels of knowledge. Nevertheless, a minority of owners reported a top-down approach, a management style which downplays the social nature of knowledge. That is, the owners are exclusively responsible for passing down the results of knowledge identification in the form of rules, instructions and training. These owners apply what Bourantas and Papadakis (1997) characterise as autocratic and/or persuasive management style. The majority of the participants reported a two-way approach, that is, top-down and

bottom-up which is closer to a consultative/and or participative management style. The dominant role of the owner in a family business was also supported by the fact that none of the few participants who reported a collective (participation on an equal footing), bottom approach (mainly from front line managers and employees) towards knowledge identification and knowledge creation belong to a family business. That is to say, in a family business, the owner it is not expected to remain inactive or inert. On the contrary, there is evidence that some Greek organisations are recognisable from their autocratic style of leadership and that their culture can be either emotional and/or rational. Nevertheless, the findings and the qualitative approach of this study do not verify that such culture is primarily emotional and secondarily rational (see e.g. Psychogios, 2011). The research findings are more congruent to Siakas et al., (2014) findings, which present the family business as striving to find a balance between the two dynamic conflicting manifestations: the family and the company. The former represents the emotional side of the organisation and the latter represents the professional-rational side of the organisation. The findings suggest that the owner-manager of a family business, when it comes to take decisions relevant to the KM process, takes into consideration potential succession plans and the role of the family members within the organisation. In other words, the owner-manager of the family business strives to find the 'power to' expression for the fulfilment of the organisational goals by finding the balance between the 'power over' and the 'power with' expression. It is within these conflicting situations where the role of practical wisdom is elevated as an important virtue for judging situated and contextual cases and dilemmas.

An extreme power over expression from the owner-manager's point of view is manifested through the exclusion of employees from engaging in the KM processes. Knowledge identification, knowledge acquisition/creation and knowledge storage in some organisations are practised exclusively by the owner-manager and their narrow circle of family members. The owner-manager believes that she or he has the required 'power to' in order to deal with the aforementioned KM processes. The facts that support this choice refer to organisations with a few number of employees, usually of low educational level and labour-intensive nature of work. In addition, the sources of knowledge are chiefly external and knowledge creation requires secrecy imply low esteem for the personnel's contribution. This type of owner is usually a very active, hard-working person who cares about their personal development. In addition, they do not hesitate to come in contact

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with external consultants and experts, and they seek ideas and knowledge from other companies, especially from abroad. Yet, this type of model becomes problematic as the size of the organisation increases from micro to medium enterprise and when the other family members of the organisation do not have the experience to support the owner-director (e.g. see Int:2).

However, the mainstream of owner-managers recognise that KM process are meaningless without personnel engagement. That is not to say that KM processes are practised unhindered. For instance, in knowledge identification process, power relations arise out of negotiations concerning the relevance and irrelevance of specific knowledge assertions as Gherardi and Nicolini (2002) pointed out. People in organisations understand meaning and common issues in relation to the nature of their tasks, duties and responsibilities. While discussion and negotiation over shared and sharable objects across different contexts (also called boundary objects, see Carlile, 2002) might bring about some kind of consensus, the latter is incomplete and fragile, for tensions between conflicting views on issues of meaning and other intermediaries are unlikely to vanish. Though knowledge identification can be taken as a boundary object itself, in some cases, it fails to become the subject of a constructive discussion, as this is discouraged by the owner-manager's strong beliefs. For instance, owners consider relevant and useful those pieces of knowledge which they can understand better, and can therefore project their benefits. For instance, in Mary's organisation the owner invested in robotics because he was able to appreciate its benefits on the production process. However, he was reluctant to invest in sales by educating and training the salespersons in marketing techniques. Hence, this study verifies Gerber's (2001) claim that often SMEs which have been established by technicians (e.g. MF-MEDIUM-FCOM1, MF-MEDIUM-FCOM2) often neglect managerial skills, or are reluctant to entrust a manager or to acquire managerial skills themselves. To put it differently, the owner-manager from her/his vantage point of legitimate power to exert control over subordinates is more likely to impose her/his view in terms of what counts as knowledge, what is relevant or relevant knowledge or what is legitimate knowledge. In such a case, the dictum 'power is knowledge' is affirmed.

The exclusion of personnel from KM processes becomes problematic as long as the 'power to' expression of the owner-manager seems inadequate to deal with the objective business facts. For instance, some owners who act as the knowledge repositories of their

organisations (chiefly micro), refuse to abandon the 'power over' expression. The knowledge storage had a very subjective-personal character. Whatever was considered important was either kept in their minds or stored for personal use. In this case, the personnel had no contribution to knowledge storage. Moreover, the owners of such companies deem their personnel easily replaceable first and foremost by themselves and/or other co-owners or family members of the organisation. This 'power over' expression in knowledge storage is disputed when the nature of business is objectively dependant on codified knowledge which had been systematically stored for years. The nature of this knowledge is characterised by its huge volume and/or its specific details that a human mind would find it impossible to hold. In this case, the personnel had contributed to knowledge storage and the 'power with' expression was part of the knowledge storage policy. Nevertheless, the findings suggest that the 'power over' expression remains in some cases an inextricable part of KM processes. For instance, some medium companies with an organised IT department, knowledge storage and automation processes among other measures can be a means not only for facilitating replacements but also for reducing the personnel due to the economic crisis. The majority of participants reported that irrespective of the justification of IT as a means to knowledge sharing and empowerment, IT applications are simultaneously used as means to strengthen managerial power and control by monitoring employees' performance.

Moreover, the thought experiment findings, concerning those participants who answered that it would be more critical to lose their personnel instead of losing their codified stored knowledge, based on the fact or subjectivity that their organisation is highly dependent on personnel know-how and tacit knowledge, revealed two interesting responses. First, the extent to which these organisations fully exploited the potentialities of codified knowledge in order to be in a position to say that they are highly dependent on personnel know-how and tacit knowledge. That is to say, some participants implied that they depended on their personnel because they failed to develop an adequate knowledge codification system. The implications of such a failure can be seen from two different angles. As 'power over' or as a 'power with' weakness of the organisation. Both cases imply a lose-lose situation, for the organisation and the personnel failed to acquire the benefits of knowledge codification. Second, some others implied that whichever knowledge codification system, some tacit knowledge which is critical to the organisation is impossible to be codified. Moreover, some employees always deliberately keep in their

minds some pieces of knowledge and know-how for personal use. In other words, knowledge storage is dependent on knowledge sharing which is sometimes hindered by antagonistic behaviour and the belief that 'knowledge is power' in the sense of knowledge hoarding/hiding. This is a rather pessimistic view which considers the 'power over' expression an inextricable part of human behaviour.

A common characteristic of the examined KM processes refers to the strong influence of experiential learning and mental models. Experiential learning defines to a large extent what counts as knowledge and therefore determines the knowledge identification process. The belief that learning from experience and learning by doing is the most powerful form of knowledge was recognised by some participants. Although this belief is widely recognised in the literature, most of the participants were not conscious of what Senge (2006:23) calls the 'delusion of learning from experience'. That is, learning from experience is a limited learning horizon, for it is based mainly on the consequences of our actions. However, the learning horizon expands as one sees beyond the consequences of their direct experience. Although experience accumulation is necessary, it is generally recognised to be inadequate for organisational learning (Romme et al., 2010 in Evangelista and Mac, 2016). Indeed, some participants acknowledged that experiential learning, in the wide sense including bad experiences from the past, were not capable to influence their good judgment concerning the benefits of KM processes (e.g. knowledge sharing and knowledge storage). In addition, they recognised that experiential learning is important but not without other forms of learning, such as formal learning, learning from networks and collective learning in the sense of an active participation in the KM processes. This different approach affirms the complex nature of practical wisdom being differentiated from one person to another.

The findings show that KM policies and behaviours are shaped mainly from the central role of the owner-manager to use her/his legitimate power to act proactively and actively, and her/his capacity to make situated judgments, and secondarily to the personnel response to participate with commitment or compliance in the KM processes. The 'power with' expression was generally recognised through the process of knowledge sharing. Consequently, the tone of knowledge sharing is mainly given by the owner, who in most cases, represents the knowledge repository of the company. Especially the owners of micro and small enterprises showed that they had the chance to build their 'teams' in a

way which they believed would promote team spirit and knowledge sharing. There are two interesting distinct approaches concerning the role of the owner or top-management in knowledge sharing, which are congruent with McGregor's (2006 in McGrath and Bates, 2013) Theory Y and Theory X respectively. The first approach (Theory Y) suggests that the role of the owner is to inspire knowledge sharing by removing the agents of knowledge hoarding/hiding. Such factors include fear, insecurity and interpersonal distrust, which are primarily personal and subjective. The educational level of the personnel, at individual and at organisational level, seems to be associated with knowledge hoarding/hiding. People of low education are more likely to harbour feelings of insecurity and antagonism. At a collective level this can cause difficulties in collaboration and knowledge sharing among the members of the organisation. Job insecurity is also affected by the prolonged economic crisis, the age of the person and their position. In addition, some male interviewees supported that antagonistic behaviour is more common in women, and especially when it came to another woman. However, this thesis does not support statistical generalisation of the finding. It is not unreasonable to acknowledge the possibility of a bias as long as the majority of men participants did not support gender difference in antagonistic behaviours. From the women's point of view the same limitation applies to the point made (Int: 17) that women feel antagonistically towards men when a woman pursues a job traditionally held by men.

Hence, this approach aims to create a working environment which guarantees comfort, confidence, fairness and job security. To put it differently, the owner aspires to acquire the commitment of the employees in order to work together harmoniously as a team. The owners believe that people fit into the team when they share the same principles. The above capacity for team building, by owners and top-management, that is, making the entire company work as a team diminishes as the number of personnel increases in small and medium enterprises. Therefore, some owners and top-management discourage antagonistic behaviour by adopting structures of flat management, equity and lower power distance. Such structures and policies relax political issues of power and control while strengthening social bonds.

Some owners in family businesses (e.g. Int:14) prefer more structured organisation which involves management by walking about. This tactic aims among other things to encourage trust and collaboration between the different departments. Despite these efforts,

sometimes knowledge sharing and trust are undermined by strong subcultures and the indeterminate nature of human behaviour which remains to a great extent changeable, personal and subjective, something which has already been observed by previous researchers (see Chapter 2).

The second approach (Theory X) suggests that the role of the owner is to impose and secure knowledge sharing. Hence, the role of the owner is to make the rules clear from the very beginning. Knowledge sharing in this case is obligation and compliance to the rules by the team members. The owner who falls into this approach demands the minimum, because they believe that nobody including themselves is willing to share all of their knowledge, only part of it. Some employees also supported the view that their employers (owners) are not that willing to share their knowledge.

The above two mental models are associated with a background of connections. First, it is interesting to make clear that the participants who reported the optimist view (theory Y) and the pessimist view (theory X) bear some common characteristics respectively. Labour-intensive organisations, with low educated personnel, do not provide 'push factors' strong enough in order to predispose staff positively or to mediate the negative effects on members of an organisation. In such organisations, the owner-managers have not been convinced of the need for KM at organisational level. However, it is interesting to make clear that such organisations (e.g. MF-MEDIUM-FCOM1, MF-MEDIUM-FCOM2) are still running successfully and have managed to survive the consequences of the economic crisis. One common characteristic of these organisations is that the employees, recognise in the owner-manager a fair employer who deserves their loyalty despite their disagreements on certain aspects.

In contrast, there are cases where the nature of the organisation and the nature of business predispose the members to teamwork, knowledge sharing and collaboration in order to be creative and productive in an ever-changing and demanding environment. Such businesses usually refer to knowledge-intensive companies, enterprises providing project-based services, and generally structures and activities in which the consequences of their actions are directly apparent. Organisations like Kate's (Interview no 4) and Leonida's (interview no 11) have to deal with a rapid rate of change in their environment. Their response must be quick and effective, for the opposite might be the cause of

operational failure, project failure and irreversible loss (e.g. fatal accidents in the case of Leonida's company). Paraphrasing the challenge for these firms, in Revan's (1982 in Garratt, 2000) terms, is to preserve the inequality: continuous learning through knowledge acquisition and creation must be equal or greater than the rate of change in the context of business environment. The characteristics of these organisations can be seen as 'push factors' for collaboration and organisational learning, which can mediate considerably any negative subjective effects against the inherently collaborative nature of the organisation.

Knowledge-intensive companies, beyond learning from experience, put high emphasis on continuous lifelong learning through seminars of natural attendance and e-learning. From the fact that none of the participants from knowledge-intensive companies (e.g. Int:4, Int:6) reported a top-down approach to knowledge identification, without professing to the claim for statistical generalisation, it is plausible to infer that such companies are more likely to support decentralised organisations and co-operative cultures. Moreover, the fact that the members of knowledge-intensive organisations are not exclusively dependant on experiential learning and expand their learning horizons with continuous learning of various forms (e.g. formal and networking) entails that their subjective views are in constant questioning and revisiting. The implications are apparent in the KM processes. The latter are inconceivable without a collaborative environment based on trust and self-autonomy. More specifically, the knowledge identification process has a broader scope beyond the individual's experiential learning, and the knowledge acquisition/creation process is inspired from the learning processes. In knowledge-intensive firms with continuous changing of produced services, and knowledge itself being the offered product, knowledge use is considered as an inherent business operational activity subject to constant review. There are two interesting approaches to the deliberately informal knowledge use process. The first suggests an ad-hoc process of knowledge use, which is not interested in making sure that all previous processes were successfully implemented. The process of knowledge use emerges from need, when the firm is unable to fulfil concrete aims and deal with specific problems. This approach echoes Snowden's (2002:102) heuristic that "*we only know what we know when we need to know it.*" The second approach downplays the role of knowledge use process and emphasises social capital values and self-autonomy.

However, dysfunctions and weaknesses relevant to the previous four KM processes are more likely to affect knowledge use. Lack of communication and interpersonal relationships between the different departments and communities in the organisation undermines knowledge sharing activities. Inadequate knowledge sharing has a negative impact on the development of the other four KM processes. Though the latter are recognised as presuppositions of knowledge use, there is no explicit KM strategy among the members of the organisation. In fact, knowledge in business is a means to an end, and the process of knowledge use makes the transition possible. Consequently, weaknesses and dysfunctions on the previous four processes are more likely to affect the achievement of the company's ends. This 'domino effect' is associated with the lack of a holistic system of KM, which is considered by some owner-managers an expensive investment during the economic crisis.

5.3 Summary

The findings showed that most of the participants were not aware of formal KM practices and systems. Nevertheless, the participants could provide their view concerning the five basic KM processes even without using the terminology of KM. Owners and employees have their own rationale concerning the management of knowledge at personal and organisational level. Participants from micro enterprises tend to present their organisation to be closer to what is considered supportive KM culture.

This supportive KM culture can be explained from two different points of view. On the one side, the role of structure is evident from the fact that micro organisations have few employees and flatter organisation, which facilitate close ties between the members of the enterprise to the extent that the whole company could be considered as one single team. Hence, this finding is congruent with previous findings (e.g. Ghobadian and Gallear, 1997; Lesser and Prusak, 1999 in Rasheed, 2005) which claim that SMEs are more likely to have a more organic and fluid culture compared to larger organisations, which enables the creation of a knowledge sharing culture. What is new in this research is that the previous claim is rather also applicable in the range of SMEs, that is, between micro and medium enterprises. This can be justified by the fact that in micro organisations with less than 10 employees there is an absence of departmental mindset and the behaviours of employees are highly influenced by the owner-manager's ethos and outlook

on team spirit. A unified culture based on careful recruitment with people that 'fit into the team' and with very few interest groups are more likely to prevent cultural inertial and resistance to changes.

However, the role of structure is not limited to the size of the organisation. There are indications that knowledge-intensive enterprises are more likely to favour supportive KM conditions. In such cases, the educational level of the enterprise's members (owners-employers and personnel) is high and the nature of their work is highly dependent on knowledge per se. The findings suggest that such persons are more likely to share the same organisational values which are associated with the characteristics of organisational culture supportive to KM, as presented in the literature review (see Table 2.5). Moreover, the nature of business as such seems to have a positive impact on supportive KM predispositions such as knowledge sharing, mutual trust and co-operation. For instance, businesses which are highly dependent on the collective effort of a group working together as a team to accomplish a mission or project are more likely to develop a supportive KM culture. In these organisations, the 'power to' expression at individual level is superseded by the 'power to' expression at organisational level, that is, the 'power with' expression which is inherently imposed by the nature of the organisation and work. In other words, the nature of the organisation and work act as driving forces or as catalysts for developing a supportive KM culture. In such organisations, the 'power with' expression is part of the members experiential learning and therefore becomes stronger and stronger with practice.

On the other side, the role of the owner-manager remains decisive in micro enterprises. The owner-manager as the team leader of a small group of people shapes the tone of the company's culture and takes decisions concerning power and control issues. To put it differently, the owner-manager has an active role in shaping employment relationships and relationships between the personnel. In fact, SMEs are usually 'owner-centric' and the owner-manager's profile reflects the company's picture. Hence, it is not surprising that some participants reported that company employees share their knowledge primarily to satisfy their boss, or in order for the job to be done. The former is associated with the personality trait of agreeableness and the latter with the personality trait of conscientiousness as enabling factors of knowledge sharing. Though this research does not support quantitative operationalisation of the personality traits in terms of variables

and measures (see also the findings of previous relevant research which remain conflicting and   inconclusive in Chapter 2), it is qualitatively legitimate to appreciate the influence of the previous findings to the extent that can be associated with the personality traits of agreeableness and consciousness. The motive of agreeableness in the eyes of the owner-manager is very strong for the employees. Consequently, the employees share their knowledge to the extent that they receive satisfaction and recognition from their boss. Likewise, the minimum of knowledge sharing is determined from the fact that in organisations it is difficult to avoid shared responsibilities. Hence, it is preferable being a conscientious employee by sharing your knowledge so as to avoid being accused for irresponsibility. The differentiation of these findings from other findings (e.g. Matzler et al., 2011) is that the two previous personality traits imply personal compliance or personal commitment rather than organisational compliance or organisational commitment.

The implications of this finding are important, for they determine the quality of knowledge sharing. Organisational commitment primarily (secondarily organisational compliance) implies trust and emotional commitment among the members of the organisation. It assumes a network of relationships that facilitate collaboration for mutual benefit. In such a case, the members of the organisation downplay the destructive constructs of knowledge hoarding and knowledge hiding. In contrast, personal commitment/compliance in the eyes of the owner leaves space for the emergence of behaviours relevant to knowledge hoarding and hiding.

A distinct case of owner-manager refers to the family business. The findings revealed that the owner-managers also take into consideration family factors to decide their KM strategy and KM implementation. Such factors rely on specific conditions and circumstances based on their personal and family story. The underlying motives of the owner's attitude towards KM processes remain to some extent personal and subjective. Sometimes, it is hard for the owner-manager to decide on the best course for their company. As one participant characteristically put it, knowledge codification entails risks and benefits and that his KM strategy would be entirely different if he had had no children to continue the family business.

Last but not least, the quality of practical wisdom shapes critical decisions and behaviours relevant to the development of KM processes as the ultimate personal trait of judgment with power, social and ethical sensitivities.

Chapter VI

Conclusion

6.1 Introduction

This study attempted to explore the challenge of KM in SMEs. The research was mainly interested in how and to what extent subjective, social and political dimensions of the organisation condition the perceptions and implementation of KM in SMEs. Considering two observations from the literature review, it is not surprising why this subject still remains blurred and under-researched. The first refers to the heterogeneity of SMEs in terms of their size, ownership and sector. The second refers to the fact that SMEs to a large extent apply some kind of informal KM practices, that is, without using the concepts, the language and terminology of KM in terms of plans, policies, structures and initiatives. Due to this idiosyncratic and non-standardised nature of KM in SMEs, this subject continues to be relatively uncharted territory and therefore calls for further investigation. The study sought answers by posing three basic questions:

-How do owners/managers and employees, if at all, understand and practise KM in SMEs?

-How do the nature and structure of relations among the members of an organisation shape KM in SMEs?

-How do issues of power and control shape KM in SMEs?

As it has been demonstrated in Chapter III, a qualitative research approach was applied as the appropriate strategy to shed light on these three intertwined and overlapping questions which represent the subjective, the social and the political dimension of KM respectively.

The field investigation was completed with twenty-one (21) semi-structured interviews with the basic actors in SMEs, namely owners/owner-managers, managers and employees. The participants discussed the subject of KM within a framework of questions that cover five basic activities of KM, that is, knowledge identification, knowledge acquisition/creation, knowledge storage, knowledge sharing and use of knowledge. For the sake of a unified structure, in Chapter IV the analysis of data followed the same KM

five activity framework in order to maintain the cohesion and facilitate the flow of the discourse respectively.

The rest of this chapter aims first to answer the research questions by synthesising the main issues of the discussion chapter, and second to provide the consequent implications. The last part of this chapter ends with a section of limitations and a 'final word-the big picture' section, which encapsulates the most important message of this thesis.

6.2 The three basic questions

The research showed that even those participants who were not aware of the concept of KM could understand the five basic activities and how these were implemented in their organisation without referring explicitly to any kind of KM strategy, policy, or model. It was not surprising then to verify the findings of previous research that SMEs mainly apply informal KM without referring to formal terminology and KM structures. To put it differently, Dalkir's (2005) definition of KM in Chapter II is idealistic when compared to how KM is taking place in these organisations. There were no explicit references with regard to the deliberate and systematic co-ordination of KM's constituent parts, viz people, technology, processes, and organisational structure with the prospect of promoting organisational learning. Consequently, the lack of 'deliberate and systematic co-ordination', which is usually established in formal KM applications, implies that KM remains incidental to other business activities and priorities for SMEs. In one sense, this is also consistent with the fact that micro and small firms in Greece usually lack formal human resource (HR) policies and strategic human resource practices (Prouska, 2011: 171,173) and if KM is taken as part of HRM policies and component of HRD (Armstrong, 2006:5, 534), then the informal approach of KM in SMEs seems rather expected. However, this informal approach remains vague and varied. The heterogeneity of SMEs in terms of size, business sector, ownership status, level of information technology (IT) and to the extent that they can be characterised as knowledge-intensive companies or labour/capital-intensive companies, was responsible for the variation of participants' views. It is within this pluralism of views where the above generic ascertainment of informal KM reveals its different characteristics. As has been shown in the discussion section, the emergent approach of KM (Bolisani, Scarso and Zieba, 2015), as a form of an evolutionary divergence of informal KM in family businesses, which is the majority

of SMEs, can be an interesting potential prospect for such organisations. However, the findings of this research differ from Bolisani, Scarso and Zieba's (2015). The latter advocate a bottom-up approach of developing KM implementation by employees, which is subsequently validated by top management/owner, while the findings suggest that the owner-manager especially in family business is unlikely to remain inactive and therefore, a combination of top-down approach and bottom-up approach appears closer to the facts.

The study confirms previous research, as has been shown in the literature review, that the business world seeks consensus rather than dissensus according to Schultze and Stabell's (2004) classification (Table 2.2). Therefore, it was not unusual to see that only one or two participants would classify their understanding and implementation of KM under the critical perspective. Most of the participants were identified as fitting into the neo-functionalist discourse and in the constructivist discourse, though in some instances there were applications of multiple perspectives or pluralism (see table 2.2). Beyond this generic classification, the research findings revealed that there was differentiation in terms of how the participants' perceptions on KM are informed by subjective-personal factors and other external or objective factors.

The analysis of findings and the discussion showed that the owner-manager plays a key role in KM implementation. This is not something new in the KM literature (see e.g. Desouza and Awazu, 2006; Sparrow, 2011; Wong and Aspinwall, 2004). What adds the present study to the body of research are 'the many faces' of the owner-manager and her/his role pertaining to the management of knowledge within the organisation in relation with the social dimension (question 2) and the political dimension (question 3). Owner-managers' understanding and practice of KM is informed by a synthesis of contextual factors, social beliefs, cognitive beliefs, business beliefs, educational background and relevant personal experiences within a dynamic ever-changing environment. The nature and structure of relations among the members of an organisation influences positively or negatively the KM in SMEs due to the owner-manager's intervention and interaction with the personnel. The nature and structure of relations is also associated with issues of power and control which shape KM proactively and interactively.

Some owners, especially of micro enterprises, due to the small number of employees, tend to build their 'teams' with people that fit as much as possible into the group according to their social beliefs. In fact, Eleftheriou and Robertson, (1999 in Prouska, 2011:175) maintained that the recruitment methods in Greek companies can be characterised as intuitive and subjective and based on personal recommendations. There were two interesting distinct approaches concerning the expectations from this 'team building' on behalf of the owner/top-management. The first approach seeks commitment on behalf of the personnel and therefore the owner/top-management strives to remove the hindrances to mutual trust and knowledge sharing. The owner-manager believes in consensus and seeks persons who can fit in. The second approach seeks only compliance to the rules by the personnel. That is, the owner believes in qualified consensus or even in dissensus. The nature of the relations in the first approach is founded on mutual trust and the personnel identify themselves with the organisation, and therefore enthusiastic involvement in knowledge sharing and knowledge activities in general are expected. On the contrary, in the second approach, active involvement in the knowledge activities is expected to the extent that the 'boss' remains satisfied and the job is executed. Despite their differences, both approaches aim to increase the chances of better communication and knowledge sharing. Knowledge sharing, either by means of IT tools and/or by direct face-to-face interaction, enables not only the transfer of knowledge to the right place at the right time, but also contributes to the transformation of knowledge from tacit to explicit. And if the main challenge of KM is to achieve this transformation as Armstrong (2006:176) put it, then intuitively the owner-managers strike at the heart of KM. To put it differently, the building of KM begins with the building of human relationships between the actors, owners and personnel. Nevertheless, the findings showed that sometimes insecurity and antagonism within the organisation are the main causes of knowledge hoarding under the motto 'knowledge is power'. Especially tacit knowledge is like a tug of a war between the owner and the employee. The direct consequences of knowledge hoarding are mistakes and slip-ups, whereas in the long term, as long as knowledge sharing is a contributing factor to other KM activities, this might lead to a lower level of organisational knowledge. That is why some owners/top-management adopt flat management even and/or policies that discourage antagonistic behaviour among the personnel.

As mentioned above, and as was shown in the analysis of the findings, social beliefs are intertwined with a combination of other factors that inform the five basic KM activities. Social beliefs, cognitive beliefs, business beliefs, educational background and relevant personal experiences are situated and constructed in different organisational and social contexts. The findings revealed that the owner-managers experience differently the contextual factors, namely family and non-family business, size of the organisation, knowledge-intensive organisation and labour/capital-intensive organisation, the particular nature of the organisation and the economic crisis. It is this differentiation, in combination with their personality traits, that form their general attitude towards KM.

This thesis has attempted to make a distinct contribution by exploring the more nuanced views of owner-manager's orientations to KM, even if this is practised in an informal way. This more nuanced view of owner-managers is a distinct contribution to the literature, for it offers new and interesting insights of how political, social, subjective and objective facts interact to achieve some equilibrium in real conditions. Among these, sometimes conflicting but intertwined dimensions the balance is fragile. A decisive personality trait in finding the balance between these antecedents relies on the owner-manager's quality of practical wisdom.

The first sharp distinction refers to the owner/manager of a family business. Hence, when one discusses SMEs, one should primarily ask this question: is this a family business? As has been shown in discussion, KM implementation in these companies (e.g. TR-MEDIUM-FCOM1) is informed by the owner-manager's succession plans. What one can infer from the above is that these owners are interested in finding out what knowledge and expertise is required of themselves, of their successors and of their employees. That is why some owners explicitly stated that knowledge identification is entirely their responsibility, and that there is no employee involvement. To put it differently, the most critical question to this type of owner-managers is how they should contemplate KM as owners with successors. The answer to this question defines their KM activities. In one sense, what sets apart the owner from the employees is this differentiation in knowledge and expertise. Based on the analogy of the five disciplines of the learning organisation as described by Peter Senge (2006), these owners encourage and contribute to the four disciplines, viz personal mastery, team learning, mental models and shared vision at

organisational level involving the personnel, while they keep the fifth discipline, that is, 'systems thinking' for themselves and their successors.

While the above type describes owners of family businesses who are about to deliver their leadership to their successors, there is a different character profile of a family business owner-manager which is closer to Dalkir's (2005) definition of KM (see Chapter II) and the philosophy of third generation of KM (see Chapter II). This type of owner and family business deserve our attention, for they managed not only to survive the economic crisis, but also, they have also experienced growth. The two characteristic cases in this study, Theo of MF-SMALL-FCOM2 and Nestor of MF-MICRO-FCOM3 showed that their understanding and implementation of KM was highly informed by their experience, acquired from an early age as members of a family business, but they did not merely rest on that. In one sense, these owner-managers had the chance to experience KM in its simplest version. As Hansen et al., (1999 in Armstrong, 2006:172) put it, KM is not something new, as for many years now family owned businesses have passed on their know-how and commercial wisdom to their children. However, the same authors remark that the shift from natural resources to intellectual assets imposed new demands and challenges to the owner/managers (ibid). In that sense, the two aforementioned owner-managers successors expanded this 'primitive form of KM' to the demands of the contemporary knowledge economy.   What set apart these owners from the other participants, among others, was their extrovert character and the fact that they described an organisational culture which is supportive to KM as discussed in Chapter II (Table 2.3). In brief, their main attitude towards business operation and KM activities was that they cannot thrive within a working environment characterised by suspicion and conflicts, but rather they require trust, common interest and hegemonic order. In other words, they espoused the constructivist perspective or discourse of KM (see Table 2.2). However, maintaining in practice such an environment can be a feasible objective for their current state as micro and small enterprises, but it would be hasty to assume that this snapshot will last for ever. The analysis of findings and the discussion has shown that, as organisations grow in size, a unitarist perspective of working relationships and a working environment without conflicts becomes a rarer phenomenon. Moreover, all the employees-participants referred that the pluralist perspective describes their organisations better except for one employee who mentioned mainly unitarism with 'some' pluralism. To put it differently, in the eyes of the employees, a unitarist perspective of working

relationships seems rather idealistic. The study gave the opportunity to employees to make their voice being heard and make their point clear. The employees-participants did not have the tendency to gloss over/glamorise the facts like the owners-employers.

Another type of family business owner-manager is one that exists mainly in micro labour/capital-intensive organisations, where the perception of KM is a private-personal issue, rather than an organisational one. In essence, the owner-manager does not involve the personnel in KM activities. Even knowledge sharing is limited among the personnel, which is usually of very low education executing standardised work under specific instructions. The nature of working relationships falls into the radical/Marxist perspective, as discussed in the literature review. There is a feeling of power distance between employees and employer. It is not unusual for the employees to feel insecure because they are easily replaceable. The leadership style is autocratic and the owner with the help of the mentor or other family members is fully responsible for running the business. This (reduced) perception and implementation of KM is essentially dependent on the owner's personal mastery and charisma and family support.

The second sharp distinction that shapes the owner-managers' understanding and implementation of KM refers to what extent they conceive their company entirely or departmentally as a) labour/capital-intensive with personnel of a lower level of skills and/or education or b) knowledge-intensive. Owner-managers from knowledge- intensive organisations who were of higher educational level considered that KM was inconceivable without the active involvement of employees and that organisational learning is a continuous process. The nature of the intensive knowledge organisation urges owner-managers and employees to deal with the many forms and levels of knowledge. Hence, these owner-managers espoused a constructivist anti-foundational KM approach.

A third differentiation of how owner-managers understand and practise KM comes from those organisations whose their nature of work is highly dependent on the collective effort of the team, in order to accomplish a mission or a project. In this type of organisations, the members are friends rather than colleagues. The KM experience in this case is worthy of our attention, for it represents a democratic version of KM, where all the members of

the organisation participate, on an equal footing, in all KM activities and decision-making.

The above characteristic cases do not represent the entire spectrum of how the owner-managers understand and practise KM, but rather they delimit it. The quality of practical wisdom, as some of kind of regulator, seems to be a considerable personal trait of the owner-manager in decision making, power expression management and response in the context of KM. The impact on KM from the nature and structure of relations among the members is generally positive and facilitated due to the small number of employees and the dominant role of the owner to create close ties with the personnel.

In the same vein, issues of power and control shape KM activities according to the owner-manager's convictions, contextual factors and the employees' attitudes and response to the organisational context. The owner can inherently demonstrate different manifestations of power such as 'coercive', 'legitimate', 'expert', 'referent', 'reward', over the employees. The owner-manager for instance can hire, lay off, make redundant, reprimand, praise, reward, promote, advise, teach, guide and inspire. Nevertheless, coercive and referent power seems to be the least common manifestation, for the owners proactively choose personnel that espouses the unitarist perspective of the organisation which suggests a voluntary collaboration to mutually achieve certain goals. That is, the owners choose a 'power with' expression and are in favour of that the employees feel low power distance, whereas the opposite seems to be the exception to the rule (e.g. Int:17). Low power distance in the sense that the owners do not try to look as powerful as possible, as being of a different kind, while they assume that their power is construed by their subordinates as legitimate and expert rather than coercive (see Hofstede, 2001:98). The owners also decide the level of involvement of personnel in KM activities.

All of them seem to converge that knowledge sharing is necessary for the organisation's operation. However, knowledge sharing is the most debatable activity. In some cases, it becomes an issue of personal consideration and/or political negotiation between the owner and the personnel. Insecurity, bad previous experiences and antagonism hinder genuine knowledge sharing between the members of an organisation. In other words, the quality of knowledge sharing depends on a person's judgment by conflating emotional, factual and contextual factors. The quality of knowledge sharing also affects the other

intertwined activities, and therefore the poor quality of knowledge sharing beyond any subsequent operational dysfunctions is at the expense of enjoying the full benefits of KM. To put it differently, the management of knowledge is elevated by means of positive power expression synergies of individual 'power to' and social 'power with' within a context of social capital that reconciles and integrates individual and social objectives.

6.3 Implications

The fact that the owner-managers were in a position to recognise the value of the five basic KM activities without understanding and practicing KM as a formal approach, that is, in a systematic and deliberate fashion, brings about some considerable observations. The first practical implication is that in such organisations owner-managers and personnel have not engaged in an open and deliberate discussion concerning what the role of KM should be in their organisation. Hence, KM is practised rather incidentally and informally, as separate parts of IT tools and activities contributing to the organisational operation. To put it differently, such organisations treat KM unfairly, for if KM really deserves people's attention, it at least requires two things. First, a holistic approach of the essential nature and the purpose of KM is required for the organisation, its stakeholders and society at large. Second, it is required to acknowledge those qualities, activities and behaviours that deserve people's attention in order to become part of the company's organisational learning and culture. The second implication, which is rather a consequence of the first, is that as long as there is no formal KM, there is no KM system, and therefore there is no integrated approach of the three basic components of KM (people, technology and processes) within enabling or friendly organisational structures (e.g. team-based, project-based and flat). This does not mean that, when there is a KM system in place, it is successful in any case. The point is that KM, as was first coined by Wiig, had a system approach and it was in a system context (see Wilson and Campbell, 2016:883) and therefore any divergence from it might cause disorientation. However, new theoretical implications emerged after the recent recognition of KM in the new version of ISO 9001: 2015 'Quality Management Systems - Requirements' (ISO, 2015) to the extent that this could exercise leverage to owners, managers and employees to become aware of KM and how it will inform their perceptions. It is quite interesting to see what the future of KM will be after this change.

The research findings also brought to the front some theoretical implications concerning the role of practical wisdom in KM, and how that will enhance our understanding of KM discourse. Last but not least, the thesis offered the chance to SMEs to re-view and re-think the concept of KM through the lens of different perspectives, contradictions and concerns of the basic actors. Therefore, each SME can be a melting pot for a constructive KM discussion in a way that fundamentally challenges the stereotype that KM is for large firms and not for small firms and that small firms are capable of managing their knowledge already and find it difficult to deal with the paraphernalia of KM systems.

6.4 Limitations

As with all studies, this thesis contains certain inherent and specific limitations. Those inherent in qualitative research problems and concerns were explicitly spelled out in terms of their impact and resolution in the methodology chapter. In the same chapter, two specific limitations were thoroughly described. In this section, the emphasis is given again to the two limitations and an additional one which are specific to this research. First, despite the intensive effort to include more female participants in the research sample, female participants were as few as 4 out of 21 participants. Though there was no bias or intended delimitation to the scope of the study, a sample of female and male participants in equal measure would have diffused any potential bias from the feminist point of view. Second, the generated findings in the analysis were derived from single sources in the organisations (one participant from each firm). Consequently, no chance was given to other members of the organisation to express her/his views. However, this second limitation also counts as a key consideration, for it was intentionally imposed after careful appraisal of ethical considerations (see Chapter 3). Third, though the sample included organisations of the three main sectors of SMEs, the findings may be attributable to specific characteristics of the individual organisations or sections in the area of Attiki Greece. Future research could delve further regarding the above three specific limitations.

6.5 A final word-the big picture

This thesis aligns with previous findings (Prouska and Kapsali, 2011) that management practices in the Greek context are undergoing a period of transition, which is associated with the inevitable consequent confusion among the actors. On the one hand, this confusion is intensified by subjective, social and political factors and the low level of

awareness in terms of KM initiatives and scope. On the other hand, there are signs mainly from younger and educated business actors who are willing to abandon previous attitudes, ideas and beliefs and take the challenge to implement new management practices. The findings also showed that the current economic crisis was not taken by the actors as an opportunity or necessity to introduce KM initiatives in their organisations. Without professing the generalisation of these findings, the economic crisis rather had a negative impact on the development of KM.

However, a new perspective of KM has appeared with the recognition of KM and the inclusion of organisational knowledge in the new ISO 9001:2015. So far, this change in the standard has passed almost unnoticed by most organisations. Perhaps this is justified by the fact that the majority of certified organisations still operate using the old standard. Nevertheless, the transition period from the old standard to the new one ends at the end of September 2018, and therefore organisations will have to comply by then and have the chance to appreciate the value of KM.

Appendix 1

Interview Schedule (template)

Core question/basic question (only for the researcher's use)

How and to what extent do subjective, social and political dimensions of the organisation condition perceptions and the implementation of KM in SMEs?

Sub-questions/secondary questions (only for the researcher's use)

1. How do owners/managers and employees, if at all, understand and practise KM in SMEs?

2. How do the nature and structure of relations among the members of an organisation shape KM in SMEs?

3. How do issues of power and control shape KM in SMEs?

1. Preliminaries-Establishing rapport

-Thank the participant

-Explain the purpose of the interview and the importance of their contribution

-Assurance of confidentiality

-Ask permission before voice recording/note-taking

-Check and verify that everything is OK and ready to begin

2. Interviewee personal profile

I would like to begin by you telling me about yourself and what you do here…

How old are you?

What is the type of your employment? Full-time, part-time, casual, fixed term or contract…

 (Distinguish between owner-manager and manager).

How long have you been with this firm/ in this post?

What is your job title/description?

 (Probe: specific tasks, use of IT, interactions with other co-workers, superiors, inferiors and/or customers.

What is your background (studies, expertise, and experience)?

 (Probe: how did you develop your skills? Formal training, informal training, mentoring, observation, asking and practising.

3. Firm's profile

(Omit this section if this piece of information has already been covered by other interviewees e.g. owner-manager or manager)

I would like to ask you a few questions about the firm...

Is this a family business? (Unless already observed, what type?)

(Types of Greek companies: Sole trader, a Company limited by shares, stock corporation (AE), a Limited liability company (EPE), a General Partnership (OE), a Limited Partnership (EE), a Silent Partnership, Private Company.

How many employees work for the firm?

(Probe: What is the type of their employment? Full-time, part-time, casual, fixed term or contract).

What are the main activities of the firm?

(Probe: create products, sell products, sell services, domestic business-local market, and international business –international –market, how the firm deals with support activities, project-based organisation, non-project-based organisation, hybrid, growth-oriented or growth-averse.

4. Knowledge identification at personal and organisational level

Could you describe, in as much detail as possible, the big challenges your firm has faced the last few years?

(Probe: the timing of those challenges before or after the economic crisis since 2008. Could you expand on the problems at personal and organisational level? How did you try to resolve these problems? Could you say something more about what changes or adaptations you had to make? (In terms of new systems, processes, methods, technology, personnel, policies etc.).

Now let's come back to your duties and tasks. I would like you to tell me how you cope with the demands and the problems?

(Probe: Discern between everyday demands, long-term demands. Being adaptive to the business environment you are in. Being responsive to customers' needs and requirements. Being capable, informed and knowledgeable).

Is everyone responsible for finding out what knowledge is lacking or what existing knowledge is already available within the firm in order to do the job?

Is it clear within the firm what the firm wants to achieve and the know-how, information, skills (hard and soft) that are required to make it happen?

Is there some kind of 'gap analysis'?

(Omit this question if this piece of information has already been covered by other interviewees e.g. owner-manager or manager)

Who is to decide what knowledge is relevant not relevant or legitimate?

Do you think wise judgments and subsequent decisions are based on principles that all members of the firm are aware of? (In the metaphor of a cake 'it is equated to judgements concerning which cake to make' (Gurteen, 1998)

(Probe: whether power relations arise out of negotiations concerning the relevance and irrelevance of specific knowledge assertions.)

What kind of tools do you use in order to find out who knows what?

What kind of tools do you use in order to find out what knowledge is critical to the firm?

How important is it to locate and capture valuable knowledge within the organisation?

How important is it to seek new knowledge and processes as a means to creativity and innovations?

How important is it to implement initiatives through sharing practices so as to maximize the use of existing knowledge?

What types of knowledge do you think are the most important to your organisation?

5. Knowledge acquisition/creation at personal and organisational level

How are new ideas, know-how and solutions to problems generated in your firm at personal and organisational level?

(Probe: What kind of tools are used in order to generate ideas, solve problems, improve processes and fill gaps of knowledge? Bottom-up approach, Top-down approach, Appeal to the experts outside the firm, R&D function, formal learning, and informal learning on your initiative or others).

How much training (seminars, workshops and courses) have you done since you have become member/ as owner-manager or manager of the firm?

How did learning and training help?

What was the impact on your job/post and the firm?

Did you discuss or share what you learned with colleagues/partners/inferiors/superiors?

(Form the question according to the interviewee).

To what extent do you think the following statements apply to your firm?

You can also show your agreement in terms of a Likert scale of five responses:

(1. Strongly Agree, 2. Agree, 3. Undecided, 4. Disagree, 5. Strongly Disagree)

-Constructive approach to dealing with different opinions, contradictions, conflicts and inequalities in terms of qualifications and skills. Such issues form the basis for deliberation and a chance to deepen knowledge

a) Learning is mandatory and b) learning from mistakes is natural

-Acceptance of diversity of actions and chosen methods of working

-Productive and full use of possessed information and knowledge

a) High professional competences of employees are highly valued and b) training is treated as an investment which in turn enhances their self-confidence

-Encouraging intellectual flexibility, creativity and openness to new ideas

a) Readiness and courage to immerse oneself in a fluid environment by participating actively in the processes of change, fact which presupposes intellectual flexibility and b) the right to make mistakes

-Changes are considered a source of inspiration and development of opportunities

-Openness on all levels in terms of changes and changeability of environment, openness to others and diversity promotes thought exchange and innovation

-Emphasis on customer satisfaction by expanding the knowledge about current and prospective customers

-Employees place a high value on specific knowledge, working capabilities, perfection, professionalism which in turn pays off in self-esteem and professional aspirations

-Co-operation within and outside the organisation by creating networks of knowledge creation

6. Store Knowledge

Can you remember from your personal experience when you became a member/owner-manager or manager of this firm how you were informed in order to respond to your tasks and duties? (Form the question accordingly)

(Probe: How new employees/managers become aware of the firm's know-how, standards, customers' needs and so on?

In case of your absence as owner-manager/manager/employee how does the firm fill the gap?

(Form the question accordingly).

Allow me to make a little thought experiment between two imaginary cases.

Case 1: Let us say that one day for some reason the firm loses all its employees and the owner has to recruit new employees with the same typical qualifications.

 Case 2: The firm all of a sudden loses whatever is documented in readable/accessible form and the owner, supported by the employees, has to restore the firm's memory.

(Discuss. Which case do you think would be more destructive to the firm?).

What kind of tools do you use for knowledge storage?

7. Share knowledge

Now I would like to have a picture of how knowledge (information, know-how, expertise, attitudes, values and so on) is transferred and shared within the firm.

(Probe: Who do you ask if you are not sure about something or you want to acquire some kind of information?)

How often might someone interrupt you asking for a piece of information or advice about how to do this or that?

Do you share feelings and perceptions with your colleagues/partners/inferiors/superiors? (Form the question accordingly)

Do you use a common language in your discussions?

 Is there some kind of 'common knowledge', that is, knowledge taken for granted by all members of the organisation? If this knowledge is deep and broad, does it facilitate sense-making and does it have a positive impact on knowledge transfer and application?

Why do you think the members/colleagues/inferiors/superiors of your firm willingly or unwillingly share their knowledge? (Form the question accordingly)

(Motives, self-interest, obligation …subjective dimensions e.g. gender, type of employment, position, age, education, other personality traits see e.g. people often share knowledge for the sake of sociability and 'noble' feelings of 'doing the right thing' or may simply see knowledge sharing as a matter of reciprocity and mutual benefit).

What do you think are the main impediments of knowledge sharing in the firm?

(Probe: knowledge hoarding which is associated with the belief that knowledge is power as one of the most often-cited main barriers to KM).

Is there someone in the firm who is entirely responsible for knowledge sharing?

What is the role of owner/manager?

(E.g. facilitating and coaching, encouraging the people to collaboration and empathy, showing the value of knowledge sharing, creating job satisfaction and commitment, enabling the chance of self-learning…or special attention to the execution of regulations and policies, providing time and resources for the people to document knowledge, emphasis in using the systems of information and knowledge documentation…).

(See this role from both sides, that is, the owner/manager's point of view and the employee's point of view).

See also power distance:

(Are there open relations between subordinates and superiors? Fluidity of roles and job description, Participatory management, Managers encouraging dialogue, informal ways of communication, communication skills, knowledge sharing, learning and creativity, transparency and unlimited accessibility to sources of information and knowledge)

What is the role of people?

(Probe the existence of: social norms, the sense of a social identity the level of care, self-confidence, co-operative and teamwork spirit, risk taking, documentation skill, ability to use a computer…).

Organisational culture focus on people

(Probe: Participatory management in decision-making promotes self-actualisation, collective responsibility, trust and mutual care in the relationships between employees and organisation, increasing autonomy of knowledge employees, active participation in the organisation's problems.).

What is the role of processes?

(Creating teamwork structures, learning-oriented educational system, participatory decision making open physical work space, flexibility of organisational structure and creating horizontal structure, non-financial reward or motivational and reward system for knowledge documentation… or job security for the people, using the principals of project management, make the roles and responsibilities clear, emphasis on legislation, knowledge documentation and knowledge storing, motivational and reward system for

knowledge documentation, employing the staff on the basis of experience and IT knowledge…)

What is the role of IT?

(Developing information management system, creating decision making support system, high investments in IT or simply supporting hardware, supporting software…).

What kind of tools do you use for knowledge sharing?

Have you ever regretted sharing knowledge (capability)?

(Probe: the case of 'de-skilling' that (IT) is used to reduce the power of employees by downgrading the level of practical knowledge-skills required in job descriptions, the case of 'up-skilling' using (IT) as a way of empowerment and enhancement employees or IT can be used as a means to strengthen managerial power by monitoring employees' performance).

How would you characterise the nature of employment relationship within the firm?

(Probe: Do the members of an organisation share common objectives? (The unitarism perspective considers organisations to be unified entities, a pluralist perspective which takes a more moderate position, acknowledging both common and diverse objectives among the organisation's members, or a radical/Marxist perspective which deems the employment relationship a matter of class difference.)

How would you describe the working culture of the firm?

(e.g. family atmosphere, harmonious working relations and little bureaucracy or instability, excessive bureaucracy etc.).

8. Use of Knowledge

If I asked you to tell me who knows this or that, how easy would it be to answer?

(Probe: Are there cases where you or someone else unnecessarily 'reinvents the wheel'?).

How do you know that important information, expertise, ideas and knowledge at large do not remain under-utilised?

What are the main objectives of knowledge utilisation (existing and new) in your firm?

(Probe: Problem-solving, customer satisfaction, efficiency improvement, innovation…).

What kind of tools and practices do you use in order to put the available knowledge into action and produce organisational outcomes?

9. The impact of recession the last seven years on KM

First, how has the economic recession affected your job?

(Probe: in terms of changes, reactions, responses and future plans).

How has the economic crisis affected your firm?

(Probe: in terms of changes, reactions, responses and future plans).

10. Closing the Interview

- **Is there anything you want to add that wasn't covered?**
- **Are there any questions you would like to ask?**
- **Many thanks for your time**

Appendix 2

Letter -Email of invitation to participate

[Date]

[Interviewee Name/and or title]

[Address]

Dear [Interviewee Name]:

My name is Dimitrios Andronikou and I am a Doctoral candidate in Social Sciences at Leicester University. I am writing to invite you to participate in an individual interview concerning the very interesting topic of Knowledge Management in Small and Medium Enterprises. For your reference and best possible information about this research, I attach a Participant Information Sheet (PIS) and a consent form.

I sincerely hope that you will consider participating in this important effort to study "The Challenge of Knowledge Management in Small and Medium Enterprises (SMEs): Subjective, Social and Political Dimensions".

I will be contacting you via telephone or email shortly to confirm your interest in being interviewed. Please feel free to contact me as specified below with any queries.

Sincerely

Dimitrios Andronikou

Email: ad307@leicester.uk.ac

Mobile: 6974734513

[End of the email]

Appendix 3

Participant Information sheet

<div align="right">

Athens 01-12-2015

</div>

The Challenge of Knowledge Management (KM) in Small and Medium Enterprises (SMEs): Subjective, Social and Political Dimensions

Dimitrios Andronikou Doctoral Candidate at Leicester University

You are being invited to take part in an academic research study.

Before you decide on whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully before you decide whether or not you wish to take part.

Please ask the researcher (email: ad307@leicester.ac.uk, mobile: 6974734513) if there is anything that is not clear or if you would like more information, or the supervisor Dr Richard Courtney, Lecturer School of Management, University of Leicester.

Ken Edwards Building, Room 208, University Road, Leicester LE1 7RH, UK

Telephone: +44 (0)116 252 5927 Email: rac16@le.ac.uk

The purpose of the research

Primarily the research study is part of the fulfilment of a Doctorate in Social Sciences based on a programme provided by Leicester University. The study seeks to explore how owners/managers and employees understand and practise KM in SMEs in Greece.

How will the study be conducted?

The research will be conducted in the form of individual face-to-face interviews at a place and time that is convenient for you. The interview will be audio-recorded and the whole process is expected to take around 60 minutes. One or two participants (the owner-manager/managers/employees) are invited from each organisation.

What are the possible disadvantages or risks of taking part?

This is an academic research which aims to understand how owners, managers and employees apprehend and practise knowledge management in the business context.

There is no intention to investigate sensitive financial or business issues.

What are the possible benefits of taking part?

In taking part, you will be able to reflect on KM issues in relation to your personal and organisational interests, which can provide useful insights into daily business practice. On successful submission of the thesis, all participants are able to request a summary of the research findings, should they wish to, by contacting the researcher.

Do I have to take part in this research?

You are under no obligation to take part in this research. You can withdraw at any time without giving a reason and there will be no adverse consequences if you do so.

Will my taking part in the study be kept confidential?

All of the information you give will be anonymised so that those reading reports from the research will not know who has contributed to it. Nobody other than the researcher/supervisors will have access to the data, which will be saved and stored securely for 5 years. On completion of the project the audio recordings will be destroyed.

Thank you for taking the time to read this Information Sheet.

Appendix 4

CONSENT FORM FOR
"The Challenge of Knowledge Management in Small and Medium Enterprises
(SMEs): Subjective, Social and Political Dimensions"

Academic Institution: Leicester University, School of Management

Please tick the appropriate boxes	Yes	No
Taking Part		
I have read and understood the participant information sheet dated 01-12-2015.		
I have been given the opportunity to ask questions about the project.		
I agree to take part in the project. Taking part in the project will include being interviewed and audio recorded		
I understand that my taking part is voluntary; I can withdraw from the study at any time and I do not have to give any reasons for why I no longer want to take part.		
Use of the information I provide for this project only		
I understand my personal details such as phone number and address will not be revealed to people outside the project.		
I understand that my words may be quoted in publications, reports, web pages, and other research outputs.		
Confidentiality		
My real name and the name of my organisation will not be used in the above. Instead a pseudonym will be used.		
Use of the information I provide beyond this project		
I agree for the data I provide to be archived at recognised research data centres. I understand that my name and other potential identifiers will be removed from the data by the researcher.		
I understand that other genuine researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.		
I understand that other genuine researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.		
So, we can use the information you provide legally		
I agree to assign the copyright I hold in any materials related to this project to Dimitrios Andronikou		
As the owner/manager of the organisation I allow other managers/employees to take part in the research as long as they wish **(if applicable) *** **Appendix 4 (Continues to the next page)**		

Appendix 4 (continues from previous page)

*Name of Owner/Manager/Legal representative:

………………………………………………………………………………………….

Signature *…………………………………... Date ……………………….

Name of participant:

…………………………………………………………………………………………..

Signature ……………………………………. Date ………………………

Researcher:
D. Andronikou   Signature …………………. Date………………………...

Project contact details for further information:
Doctoral Candidate: Dimitrios Andronikou,
email: ad307@leicester.ac.uk, mobile: 6974734513

Supervisor: Dr Richard Courtney,
School of Management, University of Leicester
Ken Edwards Building, Room 208, Level 2, University Road,
Leicester LE1 7RH, UK
Telephone: +44 (0)116 252 5927 Email: rac16@le.ac.uk

Appendix 5

Interviews Summary Form
(*Number of interview)

ORGANISATION PROFILE			
SECTOR			
TRADE	**SERVICES**		**MANUFACTURING**
3,5,10,14,20,21	4,6,7,8,9,11,12,13,		1*,2,15,16,17,18,19
TYPE OF BUSINESS ENTITY			
FAMILY BUSINESS		**NON-FAMILY BUSINESS**	
1,2,3,10,13,14,16,17,18,19		4,5,6,7,8,9,11,12,15,20,21	
SIZE-NUMBER OF EMPLOYEES			
MICRO (1-9)	**SMALL (10-49)**		**MEDIUM (50-249)**
4,5,6,11,13,17,18,19,20	3,7,12,14,15,16		1,2,6,9,10,21

PARTICIPANT'S PROFILE			
ATTRIBUTE			
CO-OWNER/OWNER-MANAGER/DIRECTOR	**CO-OWNER**	**MANAGER**	**EMPLOYEE**
5,8,10,11,13,14,16,17,18, 19,20	15	2,4,9	1,3,6,7,12,21
TYPE OF EMPLOYMENT			
FULL TIME	**PART TIME 4 DAYS/WEEK**		
2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18, 19,20,21	1		
SEX			
MALE	FEMALE		
2,3,5,6,7,8,9,10,11,12,13,14,15,16,18,19,2 0	1,4,17,21		
AGE			
30-39	**40-49**	**50-59**	**60+**
3,4,5,6,8,17,18,19	1,2,9,11,13,1 6,20,21	7,12,15	10,14
EDUCATION			
UPPER SECONDARY	POST SECONDARY	TERTIARY-HIGHER TECHNOLOGICAL	TERTIARY-HIGHER UNIVERSITY
1,2,11,13,14,17,21	6	3,7,8,18,20	4,5,9,10,12,15,16 ,19
YEARS IN THE ORGANISATION			

2-5	**5-10**	**10-15**	**15-20**	**20-25**	**25-30**	**30+**
3,4,6	2,8,9,12,21	5,7,11, 20	1,13,18,19	17	14,16	10,15

General Climate of the Interview / Impressions / The effectiveness of the Interview Schedule / Others
Interview 1: Relaxed, free from strain or tension, excellent rapport with participant who was willing to be contacted again if necessary. / An extrovert woman employee with strong views that she will give material to the research. / As in the pilot study the Interview Schedule worked well, the completion of section 5 signifies the halfway stage of the interview, section 7 (knowledge sharing) which is the longest requires

Appendix 5 (continues from previous page)

approximately 20-25 min. / A rather autocratic, labour-intensive organisation, low educational level emphasis from the participant. There is no ISO certification.

Interview 2: Relaxed, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and established easily. / A competent manager who can use language effectively in order to support his view. Surely, it will give valuable material in the analysis process. He gave the impression that he had prepared for the interview. / The Interview Schedule worked well, he made an interesting disjunction between the two parts of question 2 on the questionnaire. / A rather autocratic, labour-intensive organisation. There is ISO certification, interesting long answers with analytical skills.

Interview 3: Relaxed and productive, good rapport, the participant was willing to be contacted again if necessary. / Extrovert and spontaneous person who show his feelings with laughter, and body language, new data to the research. / The Interview Schedule worked well- a typified 60 min interview. / There is no ISO certification, he feels very strongly about the value of experience, this was repeated many times.

Interview 4: Relaxed and productive**,** good rapport**,** the participant was willing to be contacted again if necessary. / Views from an educated manager, who thinks well before answering, the participant got excited with the thought experiment, which she found very interesting, new data to the research. / The Interview Schedule worked well- a typified 60 min interview. / There is no ISO certification, a typified exemplar of a knowledge-intensive company.

Interview 5: Relaxed and productive despite the interruptions, good rapport, the participant was willing to be contacted again if necessary. / First views from an educated owner-director, surely new interesting and different data from previous interviews. / The interview scheduled worked well / There is no ISO certification.

Interview 6: Relaxed and productive, free from strain or tension, a strong rapport was established, the participant showed particular interest and zeal, the participant was willing to be contacted again if necessary. / Extrovert and spontaneous person who showed his feelings with laughter, and body language, new data to the research. / The Interview Schedule worked well. / There is ISO certification, interesting views from an employee in a medium company and IT knowledge, negative effects of crisis on the organisation.

Interview 7: Relaxed and productive, good rapport, the participant was willing to be contacted again if necessary. / The negative impact of the crisis on the organisation was obvious from his sayings and body language, new data. / The Interview Schedule worked well. / There is no ISO certification.

Interview 8: Relaxed and productive, good rapport, the participant was willing to be contacted again if necessary. / The negative impact of the crisis on the organisation was obvious from his sayings and body language, new data. / The Interview Schedule worked well, - a typified 60 min interview. / There is no ISO certification.

Interview 9: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and established easily. / An educated manager who was aware of KM, and who gave exact and rather short answers without telling narratives, new data. / The Interview Schedule worked well / There is no ISO certification.

Interview 10: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and established easily. / An educated owner- director of a family business from whom one can learn many

Appendix 5 (continues to the next page)

Appendix 5 (continues from previous page)

things because of his long experience, new data. / The Interview Schedule worked well, - a typified 60 min interview. / There is no ISO certification, negative impact of the crisis and the participant expressed his disappointment and some anger about the economic crisis.

Interview 11: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / An interesting case of owner-director, extrovert and spontaneous person who showed his feelings with laughter, and body language and who showed particular willingness to participate, new data. / The Interview Schedule worked well. / There is ISO certification.

Interview 12: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / An educated, extrovert person who showed his feelings with laughter, and body language, new data. / The Interview Schedule worked well. / There is ISO certification, an organisation with growth in the midst of economic crisis.

Interview 13: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / An interesting case of a very active co-owner-manager who saw the economic crisis as a challenge for growth, new data. / The Interview Schedule worked well. / There is no ISO certification.

Interview 14: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / An interesting case of an owner-general manager who conveys his experience and lessons learned from the economic crisis, new data. / The Interview Schedule worked well. / There is ISO certification.

Interview 15: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / An educated extrovert co-owner who showed particular interest in taking part in the research, new data. / The Interview Schedule worked well- a typified 60 min interview. / There is ISO certification, corporation with academic institution, the participant is expecting to receive the results of the research.

Interview 16: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / An educated extrovert co-owner-general manager with a sense of humour, despite the difficulties, interesting approach to the economic crisis, new data. / The Interview Schedule worked well. / There is ISO certification, a successful succession in a family business.

Interview 17: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and was built gradually from the first contact with some additional effort and after the necessary explanations and assurances. / A dynamic and very active woman owner-director of a family business, new data. / The Interview Schedule worked well. / There is no ISO certification. The certification has expired, and the company is about to become certified again.

Interview 18: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / An educated extrovert owner-director with a sense of humour, despite the difficulties due to the economic crisis, new data. / The Interview Schedule worked well. / There is no ISO certification. **Appendix 5 (continues to the next page)**

Appendix 5 (continues from previous page) A characteristic exemplar of a business man who highly values autonomy and the option of providing good services.
Interview 19: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and very easily established. / A young educated extrovert co-owner-manager with progressive beliefs (very close to the learning organisation), new data. / The Interview Schedule worked well. / There is no ISO certification, a typified example of a successful succession in a family business, continuous improvement and growth despite the economic crisis.
Interview 20: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / An interesting case of an educated co-owner-director who is willing to reveal his feelings and thoughts, new data. / The Interview Schedule worked well. / There is no ISO certification, interesting view concerning knowledge sharing.
Interview 21: Relaxed and productive, free from strain or tension, the participant was willing to be contacted again if necessary, the rapport was good and easily established. / A woman employee with similar ideas with interview 3, rather similar data with previous interviews. / The Interview Schedule worked well. / There is no ISO certification.

Appendix 6

Coding Template

CODE	DESCRIPTION	INTERVIEW No_____
PP	**Personal Profile**	
PP1	Pseudonym	
PP2	Gender	
PP3	Age Category	
PP4	Theoretical background	
PP5	Type of employment	
PP6	Years in the firm category	
PP7	Post/role in the organisation	
PP8	Years in the post category	
PP9	Development of skills	
OF	**Organisational profile**	
OF1	Sector	
OF2	Size	
OF3	Type of entity	
OF4	Family business	
OF5	Non-family business	
OF6	Market orientation	
OF7	Growth orientation	
KI	**Knowledge Identification**	
KI1	Challenges the firm has faced the last few years	
KI2	Adaptation to the challenges	
KI3	Coping with the demands and the problems	
KI4	Knowledge identification at personal level	
KI5	Knowledge identification at organisational level	
KI6	Is it clear within the firm what the firm wants to achieve and the know-how, information, skills (hard and soft) that are required to make it happen?	
KI7	Is there some kind of 'gap analysis'	
KI8	Who is to decide what knowledge is relevant, not relevant or legitimate?	Appendix 6 (continues to the next page)

KI9	Do you think wise judgments and subsequent decisions are based on principles that all members of the firm are aware of?	Appendix 6 (continues from previous page)
KI10	What kind of tools do you use in order to find out who knows what?	
KI11	What kind of tools do you use in order to find out what knowledge is critical to the firm?	
KI12	How important is it to locate and capture valuable knowledge within the organisation? (Risk minimisers)	
KI13	How important is it to seek new knowledge and processes as a means to creativity and innovations? (Innovators)	
KI14	How important is it to implement initiatives through sharing practices so as to maximize the use of existing knowledge? (Efficiency seekers)	
KI15	What types of knowledge do you think are most important to your organisation?	
KC	**Knowledge Creation**	
KC1	Tools for knowledge creation/generation	
KC2	Approach to knowledge creation	
KC3	Training and learning	
KC4	Learning and training contribution	
KC5	Knowledge diffusion after learning and training	
KS	**Knowledge Storage**	
KS1	Participant's induction in the organisation	
KS2	Induction of new employees/managers	
KS3	Temporary replacements	
KS4	Thought Experiment Case 1: Let us say that one day for some reason the firm loses all its employees and the owner has to recruit new employees with the same typical qualifications. Case 2: The firm all of a sudden loses whatever is documented in readable accessible form and the owner supported by the employees has to restore the firm's memory. (Which case do you think would be more destructive to the firm?)	Appendix 6 (continues to the next page)

KS5	**What kind of tools do you use for knowledge storage?**	Appendix 6 (continues from previous page)
KSH	**Knowledge Sharing**	
KSH1	Who do you ask if you are not sure about something or you want to acquire some kind of information?	
KSH2	How often might someone interrupt you asking for a piece of information or advice about how to do this or that?	
KSH3	Do you share feelings and perceptions with your colleagues/partners/inferiors/superiors?	
KSH4	Do you use a common language in your discussions?	
KSH5	Is there some kind of 'common knowledge', that is, knowledge taken for granted by all members of organisation? If this knowledge is deep and broad, facilitates sense-making and has a positive impact on knowledge transfer and application?	
KSH6	Why do you think the members/colleagues/inferiors/superiors of your firm willingly or unwillingly share their knowledge? (Form the question accordingly)	
KSH7	Role of gender in knowledge sharing	
KSH8	Role of type of employment in knowledge sharing	
KSH9	Role of position in knowledge sharing	
KSH10	Role of age in knowledge sharing	
KSH11	Role of education in knowledge sharing	
KSH12	What do you think are the main impediments of knowledge sharing in the firm?	
KSH13	Is there someone in the firm who is entirely responsible for knowledge sharing?	Appendix 6 (continues to the next page)

KSH14	What is the role of owner/manager in terms of knowledge sharing? Facilitating and coaching, encouraging the people to collaboration and empathy, showing the value of knowledge sharing, creating job satisfaction and commitment, creating the chance of self-learning…or special attention to the execution of regulation and policies, providing time and resources for the people to document knowledge, emphasis in using the systems of information and knowledge documentation	Appendix 6 (continues from previous page)
KSH15	Level of power distance	
KSH16	Are there open relations between subordinates and superiors?	
KSH17	Fluidity of roles and job description	
KSH18	Participatory management	
KSH19	Managers encouraging dialogue, informal ways of communication, communication skills, knowledge share, learning and creativity, Transparency and unlimited accessibility to sources of information and knowledge	
KSH20	Social norms that shape the behaviour within the organisation	
KSH21	The sense of a social identity	
KSH22	The level of care	
KSH23	Self-confidence	
KSH24	Co-operative and teamwork spirit	
KSH25	Risk taking	
KSH26	Criticism	
KSH27	Morality and spirituality	
KSH28	Documentation skills,	
KSH29	Ability to use a computer	
KSH30	Collective responsibility	
KSH31	Trust and mutual care in the relationships between employees and organisation	
KSH32	Autonomy of knowledge employees	
KSH33	Active participation in the organisation's problems by providing employees with time, sources and conditions in order to find solutions	Appendix 6 (continues to the next page)

KSH34	The role of processes	Appendix 6 (continues from previous page)
KSH35	The level of investment on IT	
KSH36	Tools for knowledge sharing	
KSH37	Have you ever regretted or felt vulnerable because of sharing knowledge (capability)?	
KSH38	The role of IT on employees' performance (up-skilling, de-skilling and monitoring)	
KSH39	The nature of employment relationships	
KSH40	The general feeling of working relations	
KU	**Knowledge Use**	
KU1	If I asked you to tell me who knows this or that, how easy would it be for you to answer?	
KU2	Are there cases where you or someone else unnecessarily 'reinvents the wheel'?	
KU3	How do you know that important information, expertise, ideas and knowledge at large do not remain under-utilised?	
KU4	What are the main objectives of knowledge utilisation (existing and new) in your firm?	
KU5	What kind of tools and practices do you use in order to put the available knowledge into action and produce organisational outcomes?	
REC	**Recession**	
REC1	The impact of the recession at personal level	
REC2	The impact of the recession at organisational level	
REC3	Adjustments /responses to the crisis	
REP	**Repeated by the participant?**	
IMP	**What the participant considers important**	
SUR	**What is surprising?**	
INT	**Interesting comment**	
CON	**Contradictions**	
KF	**Key Features**	

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