Carsten Held

A Strategic Knowledge Management Model for the Financial Services Industry

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A Strategic Knowledge Management Model for the Financial Services Industry

Doctoral Thesis

of

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Certificate of Authorship / Originality

I certify that this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Carsten Held

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Finally, I acknowledge the assistance of Mark Jones, who was responsible for proofreading the entire thesis.

I am indebted to all of you!

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List of Acronyms

BA	business analyst
CEN / ISSS	European Committee for Standarization
CoI	community of interest
CoP	community of practice
DB	Database
DBA	database administrator
e.g.	for example
e-mail	electronic mail
et al.	et alii (latin): and others
etc.	et cetera (latin): and so on
EU	European Union
GUI	graphical user interface
HR	human resources
i.e.	which means
ICT	information and communication technology
ID	identification code
IT	information technology
k-based	knowledge based
KBV	knowledged-based view
k-domain	knowledge domain
KM	knowledge management

KMS	knowledge management system
LO	learning organisation
MbKO	management by knowledge objectives
MbO	Management by objectives
OL	organisational learning
p.	Page
pp.	Pages
PhD	Doctor of Philosophy
PO	Abbreviation for a respondent being part of the participatory observation
R	Abbreviation for a respondent being part of research phase one and/or two
RBV	resource-based view
SECI	socialisation, externalisation, combination, internalisation
SWOT	strength, weaknesses, opinions threats
UK	United Kingdom
VCoP	virtual community of practice
VRIO	valuable, rare, inimitable, organisation

Abstract

The management of knowledge is still marked by a general plurality of perspectives, leading to a multitude of different definitions of knowledge as well as different proposals for models and frameworks, all of which are intertwined with and influenced by a vast collection of academic disciplines. Thus, leaving the isolated usage of single knowledge management methods such as best practices or lessons learned aside, it is almost impossible for practitioners to easily take any existing scientific knowledge management model, transform it in accordance with the single firm's conditions and then align it with its overall strategic management.

This overall state of knowledge management within the literature, as well as the rather confused state amongst practitioners, highly influenced this study. Additionally, given the sometimes fundamental differences between certain industries as well as cultures, it is doubtful that a knowledge management model that claims to be designed for practice can account for all idiosyncrasies in all industries while at the same time spanning cultural differences. Consequently, the research question has to be narrowed down to a single industry (in the case of this study, the financial services sector) as well as a certain region (in the case of this study, German-speaking countries) and is formulated as follows: *How can a financial services industry-specific knowledge management model be developed for German-speaking firms and aligned with the overall strategic management that accounts for ever-present market and/or regulatory – and hence strategic – changes?*

Accordingly, this study develops a strategic knowledge management model to fit into the rather turbulent and definitely unstable financial services industry, including necessary organisational adoptions. The model is based both on solid theoretical and practical grounds – academically, it draws from well recognised scholars in the fields of strategic management (including resource-based and knowledge-based views), knowledge management (including organisational learning) and academic literature on communities. In addition to theory, it draws from the empirical findings made by a triangulation of qualitative methods including (i) qualitative questionnaires answered by ten firms including, in some cases, up to three iterations, (ii) semi-structured in-depth interviews conducted with nine firms and (iii) participatory observation at one site.

The empirical part of this study reveals that scientific-oriented definitions of knowledge and scientific-oriented knowledge management models are not applied within German-speaking financial services companies. In addition, there is barely a recognisable link between knowledge management and strategic management. On the other hand, it shows that practitioners apply knowledge management methods much more often than they realise, which is especially true when using various forms of communities to support reaching a firm's targets. In essence, the result of this study allows financial services firms to make use of a highly flexible and thus sustainable knowledge management model accounting for various idiosyncrasies found within the industry for each respective single firm. In addition, the model tightly and seamlessly links overall knowledge management efforts with strategic management.

1 Introduction

1.1 Introduction

The financial sector of the 21st century is complex and dynamic (Shih, Chang & Lin, 2010, p. 75; Beier, 2005, p. 45). The only constant is change, which will happen faster within the next five years than in the last fifty (Gardner, 2009, p. 1; Skinner, 2007, p. 12). Long-known predictability vanished after the subprime crisis shook the industry like nothing else before, leading to further structural changes and impacting strategic decisions – both already made and those still to come. In particular, the levels of uncertainty due to almost constant changes in technology and regulations are probably higher within the financial services industry than in any other (Boot & Marinc, 2008, p. 1173). For these reasons, knowledge management as an integral part of strategic management becomes more and more important for the financial services industry (Grant & Denzin, 2009, p. 561; Safizadeh, Field & Ritzman, 2008, p. 88).

Today's financial services industry faces many demanding challenges. Amongst these are strong (national and international) competition, globalisation[1] and liberalisation (Grant & Denzin, 2009, p. 561; Shih, Chang & Lin, 2010, p. 75; Safizadeh, Field & Ritzman, 2008, p. 88; Gardner, 2009, p. 1). The demand for customer-oriented product and service innovations, as well as new distribution channels including multi-channelling, local deregulated markets and globally

[1] Globalisation as such is not a new phenomenon, but the mobility of skilled workers, trade liberalisation, faster and cheaper transportation and the possibilities of modern information and communication technologies add up to a yet unknown dimension (Asgeirsdottir, 2006, p. 21).

standardised reporting requirements – together with advances in information systems – influences today's financial services operations and impact strategic decision-making (Grant & Denzin, 2009, p. 561; Nellis, McCafferey & Hutchinson, 2000, p. 53; Brown & Kleiner, 1997, p. 237). Skinner (2007) summarises regulatory, customer and technology changes as well as threats to profitability as the four biggest challenges faced by today's financial services industry players (p. 1).

The shareholders' permanent eye on the income/cost ratio requires a constant search for more efficiency and effectiveness, although higher efficiency – especially amongst foreign banks – does not automatically lead to increased profits (Sturm & Williams, 2004, p. 1797). In this respect, knowledge-based strategies have become far more important for the financial services industry (Grant & Denzin, 2009, p. 561; Safizadeh, Field & Ritzman, 2008, p. 88). Thus, a bank has to be especially careful when it comes down to the core competencies required to operate successfully in the market – both now and in the future (Boot & Marinc, 2008, p. 1196). The importance of knowledgeable employees in such an unstable and fast-paced world is steadily increasing; these employees and the firm's overall capabilities therefore have to be regarded as a real asset in terms of competition and profitability (Koubek, 2000, p. 14; Brown & Kleiner, 1997, p. 237; Zineldin, 1996, p. 13).

While coping with faster innovation and production cycles, increased competition and sophisticated customer desires, the roles of information, communication and therefore the management of knowledge become increasingly important (Koubek, 2000, p. 12). Hence, calls for knowledge management within the financial services industry are ever-present (Willke, 2001, p.13), especially since there is a certain

necessity to create new knowledge (von Krogh, Nonaka & Aben, 2001, p. 427). Unlike some other industries – namely manufacturing, the financial service industry provides knowledge-based products and services (Grant & Denzin, 2009, p. 568; Shih, Chang & Lin, 2010, p. 75). The knowledge required for banking operations is often more complex than in other industries (Shih, Chang & Lin, 2010, p. 76). Only those banks that constantly achieve first mover advantages – via the creation of new knowledge and innovation – might to be able to transform these into sustainable competitive advantages (Gardner, 2009, p. 22; Roberts & Amit, 2003, p.107). Thus, creating the flexibility and responsiveness to create new advantages at a faster rate than competitors – often referred to as "dynamic capabilities" (Todorova & Durisin, 2007, p. 777; Easterby-Smith & Prieto, 2008, p. 235; Bogner & Bansal, 2007, p. 168; Zollo & Winter, 2002, p. 340) – is one key concern within the financial services industry (Grant, 1991, p. 131). Dynamic capabilities represent the ability to renew and reconfigure existing capabilities into new capabilities and competences. The bottom line of dynamic capabilities regarding their nature and evolution is linked to concepts of managing knowledge (Easterby-Smith & Prieto, 2008, p. 235).

Different organisations use their capabilities in different ways, leading to different levels of efficiency and effectiveness compared to competitors (Helfat & Peteraf, 2003, p. 999). Continuously being amongst the first movers within the financial services industry, and being able to provide a proven history of innovations, not only affects a firm's reputation, but also improves its performance (Roberts & Amit, 2003, p. 118) including efficiency and effectiveness.

In this respect, it is proven that firms practicing knowledge management (KM) innovate more extensively than their non-KM counterparts (Asgeirsdóttir, 2006, p. 22), producing innovations that improve daily business or operational processes (Seufert, Back & von Krogh, 2006, p. 79). Nevertheless, authors mainly discuss a specific topic within a financial services organisation, thus narrowing the focus to an operational instead of a strategic view, e.g. innovation management (Heimer, 2001, p. 6) or risk management (Strulik, 2001, p. 31-54).

Financial services derive from people for people. Thus, people make the difference, not technology (Skinner, 2007, p. 62), as back office systems and core financial services systems become more and more transparent (Skinner, 2007, p. 66). Hence, it is important for banks to "keep up" in terms of technological capabilities (Skinner, 2007, p. 4). Only those resources that are hard to imitate such as managerial information technology (IT) knowledge, or the business processes behind pure technology, are likely to continue to provide competitive advantages for firms (Ray, Barney & Muhanna, 2004, p. 35). Since scope economies, i.e. synergies, typically refer to a steady-state situation allowing for optimal operations to capture them, and given the constant flux in the financial services industry over the past ten years and, more importantly, the current turmoil with respect to the subprime crisis, there must be other factors accounting for the remarkable difference between the market leader and the average player. For Boot & Marinc (2008), learning and innovation are amongst these factors (p. 1176).

As KM has the potential to improve efficiency, decrease risk and increase innovation (Back, Enkel & von Krogh, 2007, p. V), while at the same time counter "the heightened complexity of an increasingly global marketplace" (Wang, Hult, Ketchen & Ahmed, 2009, p. 99), this study responds to the challenges indicated above by developing a KM model on a financial services corporation level. It accounts for differences among financial services corporations, allowing each to follow its existing overall strategy accompanied by an appropriate (individual) KM strategy, and supported by horizontal organisational forms in order to assure an overall strategic, as well as organisational, fit. Eventually, it will be flexible enough to be adjusted to a dynamically changing market and/or regulatory conditions.

1.2 Background to the Research & Research Justification

KM literature indicates that some KM practices are more appropriate than others, depending on firm specifics such as size or industry (Gault, 2006, p. 36; King & Zeithaml, 2003, p. 769). Going through management literature, best practices and academic literature on how to establish a KM initiative successfully within the financial services industry, the reader will arrive at the following questions: How do the corporate strategy of the company and KM fit together? Which of the models, frameworks, methods and best practices dealing with KM are the right ones? Finally, which organisational components are necessary to support KM, without having to reorganise and turn the existing organisational structure upside-down?

The reason for those questions arising in the first place is based mainly on the lack of industry-specific literature about KM and the lack of profoundly documented variables regarding when to choose which model, framework or best practice.

1.3 Research Problem

The problem addressed in this research is:

> How can a financial services industry-specific KM model be developed and aligned with the overall strategic management that accounts for ever-present market and/or regulatory – and hence strategic – changes?

Essentially, it can be argued that although a lot of literature can be found on KM, no financial services industry-specific models – actually, no industry specifics at all – yet exist. However, KM has to be applied in an industry-specific way (Becker, 2007, p. 57; Gault, 2006, p. 36; King & Zeithaml, 2003, p. 769), acknowledging at the same time that even within the same industry, KM differs according to (amongst other things) the strategy, size, diversification and globalisation of each single financial services corporation.

The actuality of this topic is not only expressed by academic scholars (Kridan & Goulding, 2006, p. 212; Curado, 2008, p. 141), but also through the interest of practitioners and management magazines. Halfway through this study, the German-speaking management magazine specialising in KM, *Wissensmanagement – Das Magazin für Führungskräfte*, actually dedicated a whole issue to KM in financial

services companies and published an article about this study (Held, 2009, pp. 16-17). This can well be understood as a clear and important sign of practitioners searching for a KM model that better suits their needs.

1.4 Outline of this Thesis

This thesis consists of five chapters and is organised in accordance with Perry's (1998b) widely accepted (Love, 2002, p. 409) proposal. The structure of this thesis can be illustrated as follows (description below the illustration):

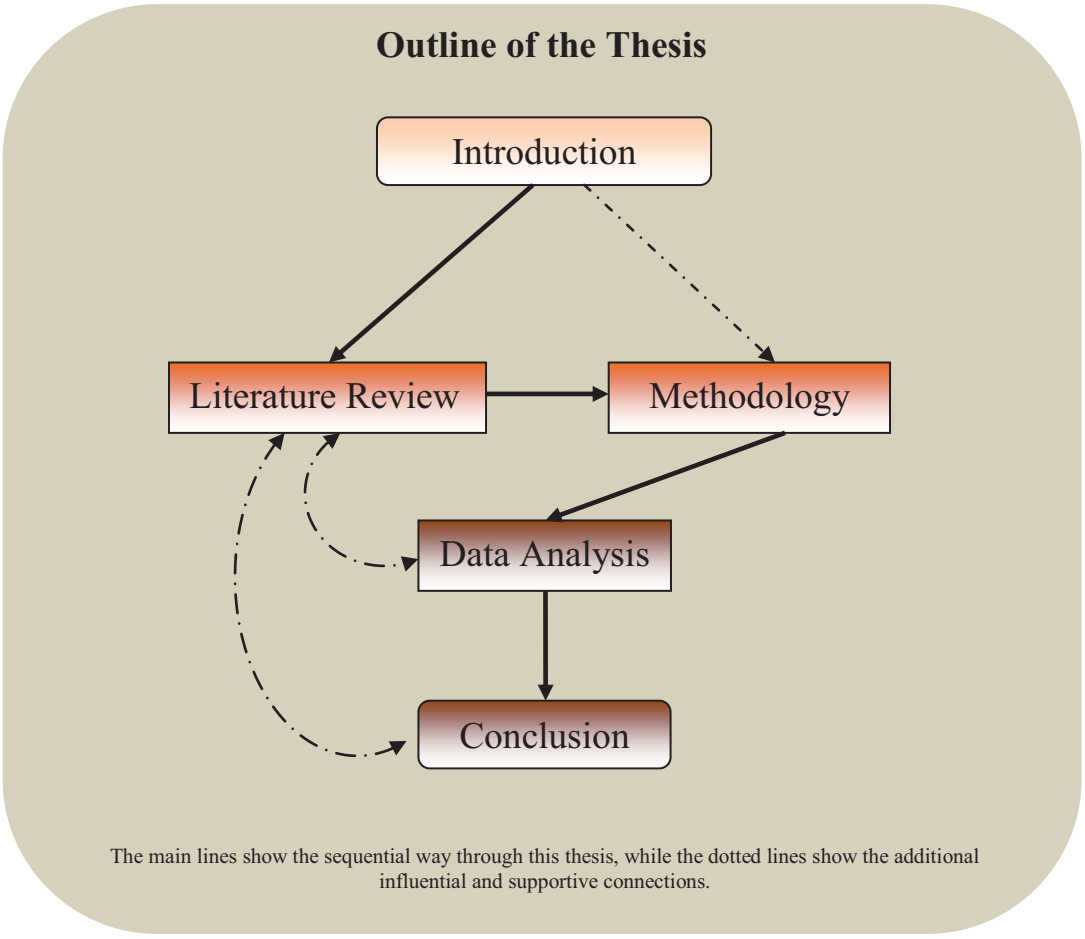

Figure 1.1: Pictorial Outline of the Thesis

Chapter 2 – Literature Review: will start by positioning KM in the overall domain of strategic management. It will begin with a brief exploration of the external and internal views on competitive strategies. These confronting views will then be aligned by focusing on their commonalities regarding their understanding and integration of KM. From this basis, the two most important frameworks for KM will be discussed, namely the resource-based view (RBV) and the knowledge-based view (KBV) of the firm. This will be followed by an intensive review of existing definitions of knowledge, stressing their importance as a starting point for any KM initiative. Consequently, KM will be discussed by detailing the most influential frameworks for conducting strategy-oriented KM. In addition, similarities between the concepts of KM and organisational learning will be stressed in order to reveal their overall value for the firm. The discussed frameworks will then provide the basis for the theoretical KM model developed within this thesis. This pure KM basis will be finally enriched by a discussion on organisational issues regarding supplementing the primary organisational structure with so-called communities and a brief introduction into managerial aspects. Finally, Chapter 2 will conclude with a propositional theoretical strategic KM model derived by drawing from the different aspects discussed. This model will then be explored empirically as part of this thesis.

Chapter 3 – Methodology: will detail the research methods used within this study to validate the propositional KM model developed. This chapter will start with an acknowledgement of existing and practised ontological and epistemological views on how to conduct strategic management and KM research. Next, a sound justification for the use of a functionalist/positivist paradigm and qualitative research methods will be provided. This will be followed by a detailed insight into the research

procedures used within this study, including a discussion on validity, reliability and generalisability in the light of data collection and data analysis. The chapter will conclude with a brief discussion on ethical issues.

Chapter 4 – Data Analysis: will present the findings of the qualitative research conducted with German-speaking financial services firms regarding their KM efforts in relation to the research question. These findings will be analysed, discussed and compared with the propositional framework developed in Chapter 2.

Chapter 5 – Summary, Conclusions and Implications: will provide a conclusion for each relevant topic of the strategic KM model, and summarise this with respect to the research problem and in comparison with the relevant literature reviewed in Chapter 2. This will be followed by providing implications for any theory, methodology and practice based on this study. Next, limitations that restrict this research will be disclosed and their possible impact on the results explained. Finally, suggestions for future research into the field of KM will be provided.

1.5 Theoretical Framework & Limitations

The overall theoretical framework relevant for the literature review of this thesis can be illustrated as follows:

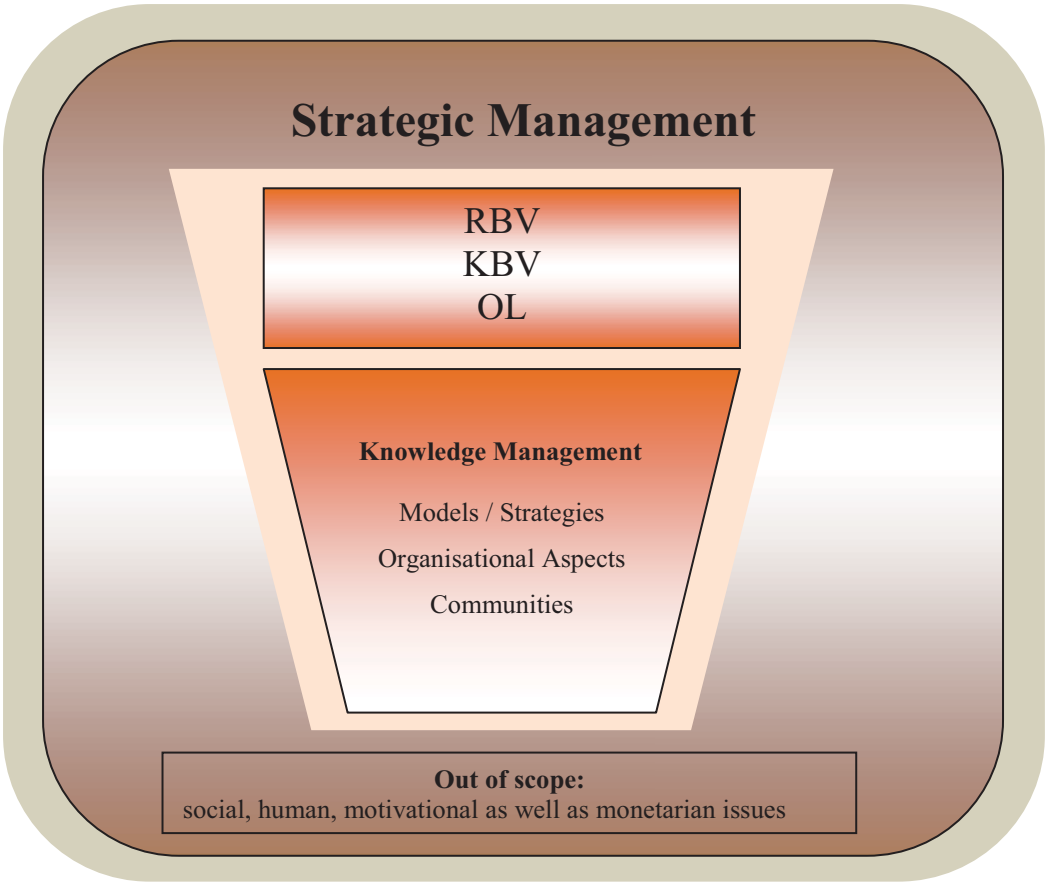

Figure 1.2: Overall theoretical framework and limitations

Any of the below-mentioned (soft) factors are very important for the failure or success of any KM initiative, but were – purposely – left out of this thesis because they may have led to imperfect or even false understanding and conclusions. A brief justification for this approach is the fact that (i) the question on how to motivate employees is a generic one that can be answered outside the framework of KM (and as such is a study in its own right); (ii) a cost/benefit analysis attempting to quantify the value of KM is not yet in a practicable state; and (iii) cultural aspects are far too complex and appear differently on different levels of analysis in order to include

these aspects in a strategic model. For these reasons, the factors detailed in the following subsections are often cast aside by other academic scholars, too.

1.5.1 Costs

Coordination and opportunity costs (Zollo & Winter, 2005, p. 615) can be reasons behind unsuccessful KM initiatives. Nevertheless, the outcomes of KM should be translated into measures of effectiveness such as trust and dependence (e.g. the promotion of mutual trust and better communication), learning and memory (e.g. expanding the overall knowledge base and promoting knowledge transfer) and innovation (e.g. leveraging knowledge or improving decision-making), rather than monetary measures (Anantatmula & Kanungo, 2008, p. 360). In this respect, relying solely on cash-based metrics results in incorrectly stressing cash-based KM (Gardner, 2009, p. 13).

1.5.2 Motivational Issues

A growing part of the KM literature deals with the influence of incentives (Watson & Hewett, 2006, p. 170; Dunford, 2000, p. 298), reward systems (Casselman & Samson, 2007, p. 75) and motivational issues (Watson & Hewett, 2006, p. 162; Osterloh & Frey, 2000, p. 539) including the managerial concept of management by knowledge objectives – MbKO (Probst, Raub & Romhardt, 2000, p. 88).

An oft-cited issue concerns the so-called “free-rider problem” inasmuch that the problem with public goods is that one might enjoy the good without contributing to it – as long as others do so (Zárraga & Bonache, 2005, p. 664; Cabrera & Cabrera,

2002, p. 693; Hansen, 1999, p. 87). Lin & Huang (2010) define it as the likelihood that individuals contribute less knowledge to others than they could, using the term "knowledge withholding" (p. 188). The more members of a team that decide not to contribute to the knowledge of the group, the higher the costs and the lower the benefits for those who still do (Zárraga & Bonache, 2005, p. 664). On the other hand, the more often an individual uses the knowledge of others, the more this individual is willing to contribute knowledge (Watson & Hewett, 2006, p. 169). To counter the free-rider problem, a certain team atmosphere or group cohesion is necessary (Zárraga & Bonache, 2005, p. 664) as well as the promotion of personal responsibility (Cabrera & Cabrera, 2002, p. 695). In addition, the role of the team leader is important (Zárraga & Bonache, 2005, p. 667-668) in order to "direct" all team members towards contributing to the knowledge base. Nevertheless, academic literature also recognises the existence of the other extreme: knowledge altruism, most likely when organisations hire "nice people and treat them nicely" (Cross & Prusak, 2005, p. 460). Additionally, any knowledge system is designed mainly around the lack of experience of other (less experienced) colleagues (Werr & Stjernberg, 2003, p. 897). This might well limit the motivation for those who are supposed to contribute. However, leveraging one's own experience is also expressed in terms of salary paid to more experienced workers (Werr & Stjernberg, 2003, p. 901). Finally, nobody is an expert in anything. In the end, this makes anybody (in one way or the other) to a "less experienced colleague" regarding a specific knowledge domain.

One important precondition for this study is that individuals who engage in the organisation subordinate their own personal purposes, rights and desires to those of a disciplined, profit-seeking firm (Spender & Scherer, 2007, p. 12).

1.5.3 Cultural Issues

Although culture is of importance when dealing with KM (Casselman & Samson, 2007, p. 77), as an important contributor to making KM work (Amin & Cohendet, 2004, p. 26), it is explicitly excluded. Corporate culture can be understood as the combination of values, core beliefs, behaviour models and emblems. It represents the value system of the company and will become the employees' behavioural norm. As King & Zeithaml (2003) demonstrate, knowledge resources are at least industry-specific and, in some cases, even organisation-specific (p. 763). Hence, every organisation's culture is an independent entity different from that of any other organisation (Yeh, Lai & Ho, 2006, p. 797). Furthermore, organisations always include – per organisation – different employees with different perspectives, leading to different activities. These, together with the firm's idiosyncrasies in history, socio-cultural background, rules and routines, form and shape the culture (Sousa & Hendriks, 2006, p. 329). Even within the same profession, different groupings develop distinctive cultures within professionalisation projects (Ferlie, Fitzgerald, Wood & Hawkins, 2005, p. 131). Similarly, within the same firm, there are distinct cultures, e.g. research and development, technicians, engineers or claims processors, which can also be found within quite similar professions such as sales and marketing, accounting and budget forecasting or medecine (Brown & Duguid, 2001, p. 202).

Consequently, no cultural unity exists within the firm (Brown & Duguid, 2001, p. 200). As such, even the work of Casselman & Samson (2007), who identify seven key components for strategic management (which also need to be reflected upon within the knowledge strategy of a firm), leaves cultural aspects aside (p. 74). In this respect, Dixon (2000) compares the often cited necessity of having to create the right culture first, putting the cart before the horses – once employees begin to share ideas and knowledge, learning and a KM culture start to evolve (p. 2). In practice, the African Development Bank (2008) follows this line of thought with the statement that their KM strategy is expected to establish a knowledge culture within the bank (p. iv).

1.6 Conclusion

This thesis will construct and evaluate a strategic KM model to target the financial services industry and thus account for the specifics of this industry as part of the tertiary sector of the economy. Special attention will be paid to satisfying both academics and practitioners alike (Duncan, 2006, p. 14), as already accounted for by an article published in a German-speaking management magazine dedicated especially to KM (Held, 2009, pp. 16-17).

Much of the confusion existing in a number of related literatures, including KM and organisational learning, is based on the failure to integrate concepts and literature into a single perspective based on a knowledge-based theory of the firm (Spender, 1996b, p. 66-67). In addition to being fragmented, the literature is characterised as being in need of refinement before academics and practitioners can take advantage

fully of the field (Duncan, 2006, p. 14). This thesis will contribute to the resolution of these issues.

2 Literature Review

2.1 Introduction

Whereas the previous chapter provided an outline introduction to this study, this chapter deals with an in-depth analysis of the relevant literature. The scope of this literature review involves three main areas. First, KM has to be placed in the greater context of strategic management (Meyer, 1991, p. 825; Zack, 1999a, p. 130; Grant, 1991, p. 115), which is addressed in section 2.2. The enclosed subsection examines existing commonalities between the external and internal views on how competitive advantages can be achieved (section 2.2.1). The following two subsections then describe the resource-based view (section 2.2.2) and the knowledge-based view of the firm (section 2.2.3).

Second, knowledge and KM have to be defined and placed in the context of existing models and strategies, the subjects of which are examined in sections 2.3 and 2.4. Hence, the subsections dealing with KM are further detailed to capture relevant KM models and strategies (sections 2.4.1.1 up to and including 2.4.1.6), existing commonalities between the disciplines of organisational learning and KM (section 2.4.2), the role of IT within the KM domain and insights into the meaning of KM maturity and knowledge evolution issues (section 2.4.4).

Third, it is important to delve deeply into the organisational aspects of KM, which are covered in section 2.5. The following subsections depict the need to enhance a firm's formal organisation in order to support KM (Un & Cuervo-Cazurra, 2004, p. 28) by means of appropriate secondary organisational forms (section 2.5), namely

communities and networks – section 2.5.1.1 – and the concept of weak and strong ties – section 2.5.1.2. Finally, managerial aspects with respect to KM are described in section 2.5.2, with a special emphasis on control mechanisms in section 2.5.2.1.

Sections 2.2 up to and including 2.5 lead towards a propositional KM model in section 2.6. Finally, section 2.7 provides a summary of this chapter. Overall, Chapter 2 can be illustrated as follows:

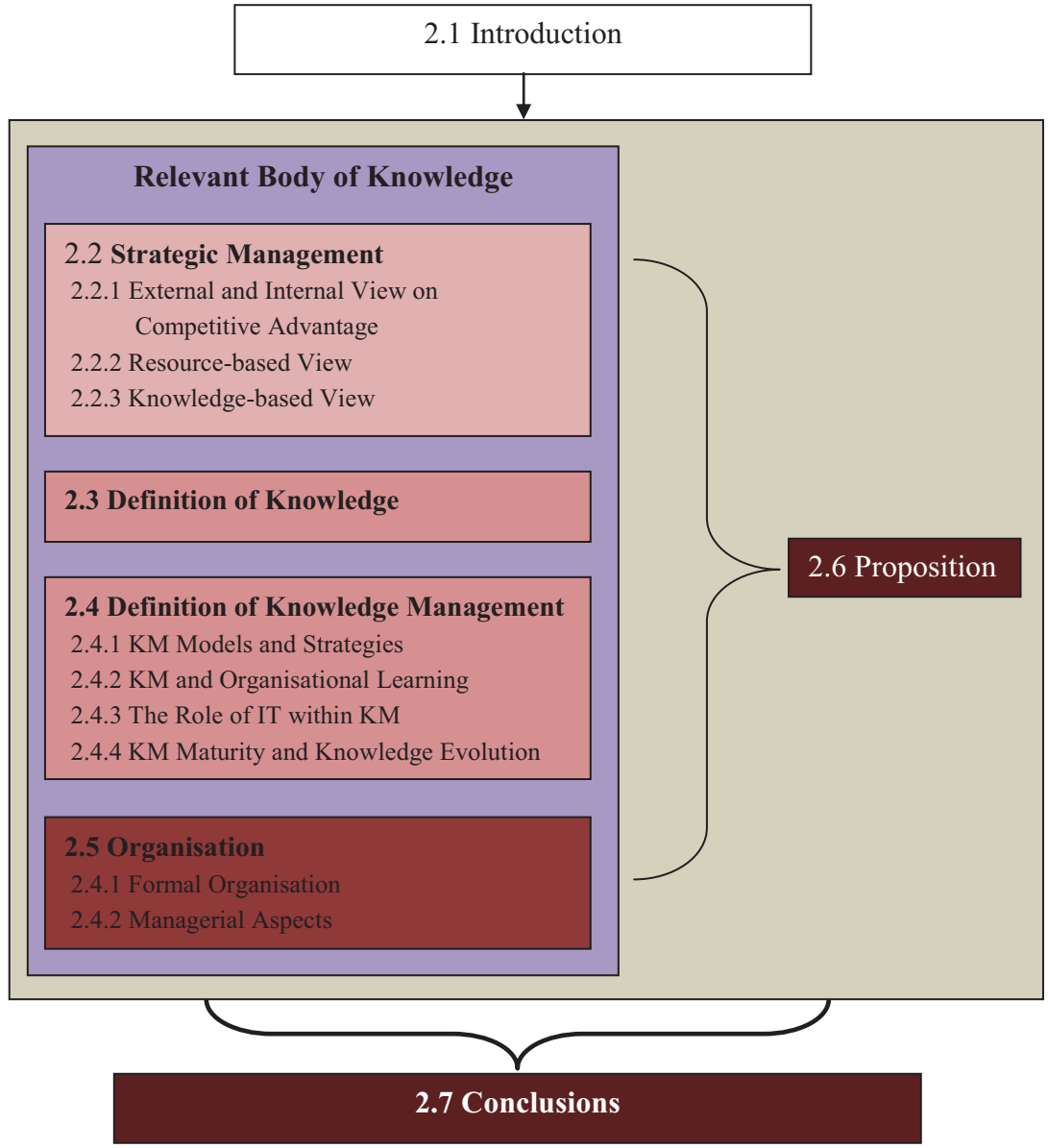

Figure 2.1: Pictorial Representation of Chapter 2