Aligning Knowledge Management with Competitive Strategy: A Framework

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Abstract: This paper presents a hybrid approach to understanding the knowledge management requirements for a knowledge intensive service organization. It proposes a strategy-knowledge management alignment framework grounded in literature. The framework was constructed by studying four published case-studies that tackle knowledge management at world class management consulting firms. The paper then applies the framework to two cases in the knowledge intensive services sector. The first case studies a young management consulting firm needing to formalize its knowledge management policies and processes. The second case studies the creation of an IT Outsourcing Services Division by a traditional telecommunications company that needs to expand its product offering to increase its opportunities for growth in a small market.

The two case studies support the proposed framework and show that it can be used to obtain practical solutions in a business environment. One of the case studies also contributes to developing the case method in research by using the Socratic Dialogue as a means to collecting and analyzing evidence.

Keywords: Socratic dialogue, knowledge management, alignment, professional services, knowledge for competitive advantage

1. Introduction

Although knowledge management has attracted much attention in academic and practitioner circles in recent years, it has been around for somewhat longer. Some diehard extremists may say it all started one million years ago with hominines' first tools and guttural communications; others may say it started with writing three thousand years ago; still others would vote for the advent of the press in 1450 for Westerners, but 450 years earlier for the Chinese; or the computer in 1950; or in the early years of the 21st century when business intelligence in our organisations became a seriously issue (Friedman, 2005; Seabright, 2004; Bhagawati, 2004; Collins, 2002; Fischman, 2005).

As fascinating as this debate on the origins of knowledge management may be there is a challenge that our ancestors did not have: the knowledge base doubles every 4 to 5 years. At this ferocious rate, students will actually “know less” of the total body of knowledge when they emerge from their university course than when they entered it. Although this is true of knowledge in general knowledge management is especially important in professional services organizations because these are a people-based business whose service delivery is intimately linked to the knowledge and skills of the staff delivering the service (Ezingeard et al., 2002). As Nachum, (1999) pointed out

“The production processes of these services are based on manipulation and application of knowledge by highly educated employees to provide a one-time solution to specific clients’ problems”.

This paper addresses KM in management consulting firms. This type of firm has several special characteristics within professional services firms. In the first place they are particularly knowledge intensive. While medical clinics or legal buffets meet their clients and carry out most of their work on their own premises that can give some differentiation, management consultants are working nomads that more often than not work at the Client’s site. Secondly, the client’s staff does not only take an active role in the full cycle of delivery of the service, but it often demands knowledge transfer from the consultant. Finally, the work is usually won through a competitive bidding process

The objective of this paper is to address the following research questions: How do professional services firms approach knowledge management? How does their approach to knowledge management relate to their competitive strategy?
2. Methodology

This paper reviews the literature on knowledge management in management consulting firms, from which it develops a framework for understanding knowledge management in this type of organisations. It then tests the framework by means of two case studies: Alpha Consulting and Beta-Telecom (these are pseudonyms as the firms have not authorised disclosure of their real names).

Four published case studies on knowledge management in management consulting firms are reviewed. They are the following cases:


Key lessons are extracted from each case using cross-case analysis to find common trends and differences in approach. From this analysis and critique there emerged a framework to understand the interactions of People-based networks and Technology-based networks and how these two different approaches relate to competitive strategy. This framework is later enriched with lessons learned by the authors through their personal experience as practitioners in this field.

The empirical part of this research applies the framework to Alpha Consulting, a Strategy-Technology alignment consulting boutique with a global footprint; and to Beta-Telecom, a telecoms company that has recently entered the IT Outsourcing Services space. While at Alpha-Consulting a technique called “Socratic Dialogue” was used to gather and analyze the evidence, at Beta-Telco a more traditional interviews and workshop approach was applied.

At Alpha Consulting, after collecting background information on the firm, the knowledge management framework derived from the literature was presented to a global planning meeting with the 12 leading partners. At that meeting the framework was validated in terms of its applicability to Alpha Consulting. The dynamics of the session was achieved by presenting the framework at the beginning, and then using the Socratic Dialogue as a process of learning through discovery that by its own nature requires more intellectual activity on the part of the learner than normal one-way situations. It allows for a greater degree of reflection, discovery and self learning, which normally has more meaning and has a greater chance of becoming internalized by the learner in a more enduring way (Remenyi, 2006; Remenyi & Griffiths, 2008). In this particular case, each participant was asked to think of a personal experience in knowledge management. Because Alpha Consulting is a relatively young firm, and the 12 participants had rich experience at other firms before joining Alpha Consulting, some of the cases brought forward were not Alpha Consulting experiences. The participants took turns to explain their example in detail while the remaining 11 listened carefully and asked for clarifications when necessary. After each of these sessions discussion was held with an aim at extracting concepts of general application that were used to improve the framework that emerged from the literature review.

At Beta-Telco the unit of analysis is only the relatively young Corporate Services Division of the telecom’s firm, which is a highly knowledge intensive area of the company, and in that sense has similarities with the strategy and IT consulting services cases used to derive the knowledge management framework. The frame was used on a consulting engagement to derive some guidelines on how the Division should design its knowledge management. The fieldwork to gather and analyze evidence was more in line with conventional qualitative case-study research and consisted of performing seventeen semi-structured interviews to senior managers and carrying out four management workshops, in all involving some 50 managers. This activity took place between September 2007 and January 2008.
3. Knowledge management in management consulting firms

3.1 Definitions

Facts on their own provided an incomplete understanding: ‘A fact acquires meaning only once it is associated, linked to other facts’ (Greenfield, 2003, p.158). The more structure that is added to a pool of information, the more it can be referred to as knowledge. Knowledge in this paper is characterized as information plus the causal links that help to make sense of the information (Sarvary, 1999). So if data is information devoid of context, and thus information is data in a context, knowledge is information with causal links. Knowledge management is a business process through which firms (a) create, synthesize and share their collective information, insights and experience; (b) combine them with knowledge from external sources; and (c) put all this knowledge to use in solving business problems (Ruggles, 1998; Ezingeard et al., 2002; Sarvary, 1999).

3.2 Analysis of the cases


Working with the four published cases as secondary data using the Strauss & Corbin (1998) coding process at the phrase level six core concepts emerged:
1. The interaction of Knowledge Management and Strategy
2. The importance of developing a Knowledge Culture
3. The Knowledge Management dilemma: Looking Backward vs. Looking Forward
4. The relationship between Knowledge Management and Value
5. The relationship between Knowledge Management and Technology
6. The relationship between Knowledge Management and People Networks

The derivation of each of these concepts and its description and analysis can be seen in Griffiths & Remenyi (2007).

3.3 Synthesis of the cases: A knowledge management alignment framework

Two clear trends emerge from the cases studies: While some organizations rely on a knowledge codification strategy that seeks to make knowledge independent of individuals and store it in repositories for users to access through information and communications technology (ICT) tools, others rely on a personalization strategy that emphasizes the channeling of individual expertise to the right place at the required time through person-to-person interaction.

The issue of how outward looking the organization has to be in its knowledge management also emerged as a core concept. Organisations need to find the right balance, the most effective blend, between internal and external content, and avoid the trappings of being too introverted, too satisfied with their own view of the world. Their internal networks need to link up with other networks in their areas of expertise (Ezingeard et al., 2002; Bartlett, 2000; Collins, 2002,1998)

This can be represented in a two-dimensional space as shown in Figure 2. One axis represents the degree of development of knowledge management founded on Technology-based networks, from Low to High. The other axis represents the degree at which the organization has developed its person-to-person knowledge sharing capabilities. In both cases the “High” development indicates a robust integration with other knowledge networks.
The description of the approach to knowledge management of each firm given in the four cases studies, enables placing each one of the firms on this plane (Figure 3). Andersen Consulting is the one that has gone furthest in codifying and de-personalising knowledge. Ernst & Young has also gone a considerable way in making knowledge explicit and placing it in repositories, but it also promotes some degree of people-networks on top of its technology-based networks. And from the description of Centra Consulting, it has applied a similar knowledge management strategy, but with still stronger interpersonal relationships. On the other extreme, McKinsey can be placed strongly on the personal-network dimension with a less developed technology-enabled knowledge infrastructure. Interestingly, from comparisons with Boston Consulting Group (BCG) in the McKinsey case, it is also possible to place BCG on this plane. BCG’s close links with MIT appear to make it more outward looking.

The link of knowledge-management-approach to business-strategy emerges clearly from this representation. Business consulting firms that build their competitive positioning on delivering tailor-made, one-off services to their Clients, place themselves in quadrant II. That is they approach knowledge management by developing strong people-based networks. They create knowledge by motivating their staff to write thought leadership pieces that crystallise the products of their interaction with external research centres and reflections on the outcomes of their projects. Knowledge is shared in person-to-person relationships within and across communities of practice. As a result, knowledge creation and sharing is a bottom-up process that promotes creativity and originality, and requires a relatively low investment. Producing original solutions to Client problems are a core process of these firms and technology investments are focused on supporting this process through groupware and person-to-person communications. As a result the organization is based on a small ratio of consultants-to-partners. The strategy consulting firms are typical of this model.
Business consulting firms that compete by building scale and efficiency, and found their value proposition on replicating proven solutions place themselves in quadrant IV. Their knowledge management initiative is top-down, with standards and rigid guidelines created at the centre. They make significant investments in ICT networks aimed at producing large document repositories and powerful search engines. They populate these repositories by motivating their staff to upload the deliverables of their projects, which their colleagues can later use as “accelerators” for subsequent engagements. The more extreme of these firms attempt to completely automate the search processes and eliminate interpersonal knowledge sharing. Others tend to prioritise technology networks but complement them with people-based networks. The core process is managing projects to replicate solutions as fast and efficiently as possible. As a result the organization is based on a large ratio of consultants-to-partners. The enterprise resource planning (ERP) implementation firms are typical of this business model.

Start-up and boutique consulting firms are forced into quadrant I. Their value proposition to clients is based on trust from the clients’ management, or on specific expertise of their partners. Their staff tends to have strong interpersonal relationships, but they are placed at the low end of the “People-based network” axis because they do not have formal knowledge sharing processes, policies for promoting knowledge creation, or structured communities of practice. They are also at the low end of the “technology-based networks” because they do not have the substantial resources required for investments to move up this axis.

The hybrid approach to knowledge management of quadrant III is probably a utopia, and utopias are dangerous: they mobilize in the short but paralyze in the long term (Romano de Sant’ Ana, 2006). A hybrid approach to knowledge management appears to be a reflection of ambiguity and avoiding decisions on business strategy (e.g., going after every opportunity, without being realistic on the firm’s ability to deliver value), or falling to the siren call of offering a “one-stop-shop” to its client base. There were a few highly visible failures in the 1990s: For example EDS trying to move up the value chain by acquiring AT Kearny to offer business strategy services as well as ICT outsourcing; or Booz-Allen & Hamilton trying to take advantage of the ERP wave by moving down the value chain from business strategy to implementation services. But it is by now clear that the factors that make a firm good at creating personalized products makes it inefficient at replicating solutions and, vice-versa, those factors that make it effective at replicating standard solutions introduces rigidities that make its bespoke services blunt and colourless (Treacy & Wiersema, 1995). This paper proposes that, precisely, one of these factors is how it manages knowledge.

This relationship between business strategy and approach to knowledge management is summarized in Table 1.
Table 1: Linking knowledge management approach to strategy

<table>
<thead>
<tr>
<th>Business Strategy</th>
<th>Approach to Knowledge Management</th>
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<tbody>
<tr>
<td>Trust or Narrow Expertise Based</td>
<td>Quadrant I</td>
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<tr>
<td></td>
<td>Low on Technology-based networks</td>
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<tr>
<td></td>
<td>Low on People-based networks</td>
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<tr>
<td>Thought Leadership/Personalisation</td>
<td>Quadrant II</td>
</tr>
<tr>
<td></td>
<td>Low on Technology-based networks</td>
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<tr>
<td>Hybrid/Utopia</td>
<td>Quadrant III</td>
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<td></td>
<td>High on Technology-based networks</td>
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<tr>
<td></td>
<td>High on People-based networks</td>
</tr>
<tr>
<td>Productivity/Re-usability</td>
<td>Quadrant IV</td>
</tr>
<tr>
<td></td>
<td>High on Technology-based networks</td>
</tr>
<tr>
<td></td>
<td>Low on People-based networks</td>
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</table>

4. Alpha Consulting case study

4.1 The firm

Alpha Consulting is a young firm, barely 3 years old at the time that this research was launched. It was founded in the UK by several experienced consultants who left one of the large ERP implementation firms, with an aim at offering IT Value Management services. At the time of its founding its leaders thought that “independence from IT vendors” was an essential value of the firm.

In its second year the firm expanded into continental Europe through the acquisition of a mid-sized technology solutions implementation consultancy, with some niche products for the retail and fashion industries based on integrating SAP, Siebel and other industry-specific solutions. This move brought into question the feasibility of simultaneously being independent from vendors and implementing their solutions. The partners of the firm were struggling with this question at the time of the meeting where the fieldwork of this research took place.

In the months before the mentioned meeting, the firm also expanded into Asia Pacific and into America by incorporating local partners and starting operations from scratch based on those partners’ local connections and intellectual capital provided by the centre. One of the lessons from this growth process is that the background of the local partners influences the particular slant of the firm. In this vein, the Americas practice was founded and developed as an IT Value Management firm similar to the UK model, but the Asia Pacific one is closer to a strategy and process improvement practice. For the Asia Pacific partners the stress on “IT” in “IT Value Management” is a hindrance, and they would rather the service of the firm be described simply as “Value Management” or “Business Value Management”. This again was one of the discussions taking place at the time of the meeting.

The governance, organization and equity ownership schemes of the firm are probably closer to a franchise than to a traditional professional services partnership. The acquisition of the continental Europe implementation services took the consultant-to-partner ratio from 1:12 to 1:15, which falls in between the ratios for traditional strategy firms (1:5 to 1:7) and IT integration and implementation firms (in excess of 1:20).

4.2 The process

The meeting was opened by presenting the definition of knowledge, and the framework developed in section 4 of this paper, and explaining how it was developed. The participants where then asked to think of a relevant personal experience in KM.

As described in the Methodology section, each individual presented his example which was later discussed in terms of the framework. The first experience to be analysed was that of one of the UK partners, followed by one of the Australian ones, then one of the continental European experiences, and in fourth place one from the Americas.

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1 IT Value Management services refers to helping organisations realise the benefits of their IT investments, and comprises actions from evaluating whether its IT investments are aligned with its business strategy, to implementing training programmes to enable better use of its information systems.
When the continental European case was being discussed a vivid discussion emerged around the issue of whether the firm should be in the business of implementing solutions; how that affects independence; and whether it would be possible to grow at the expected rate on purely IT Value management consulting services.

When the fourth experience was being discussed, the group decided it agreed with the framework presented, and that it was not worth continuing down that line but that they would find the session more productive if they now focused on developing some principles for KM at Alpha Consulting.

Agreement was reached to move in this new direction. However the group was asked to place Alpha Consulting on the 2X2 framework and, after brief discussions, consensus was reached that it sits deep in quadrant 1.

4.3 The outcome
The group finally agreed on nine KM development principles.

1. Alpha Co will favour People Networks over Technology Networks in its approach to Knowledge Management
2. Staff will have access to all knowledge, directly or indirectly
3. Knowledge will be organised along a 2-dimension matrix, comprising industries and competences. Each industry and competence will have an expert lead reference.
4. There will be a repository with the latest Methodologies; it will have an owner and will be updated regularly
5. There will be a people repository with the CVs of all consulting staff; responsibility for keeping the CVs updated will be placed upon the individual
6. There will be a Client repository with a brief description of each Client and what work Alpha Co. has done with them. The Partner responsible for the Client is given responsibility for its updating
7. There will be a rudimentary but reliable repository tool for all re-usable material
8. Each geography will define who has access to the re-useable material knowledge system
9. Only Alpha Co.-developed, Alpha Co.-licensed and public domain documents will be uploaded onto the re-usable knowledge repository

The implementation of these principles was broken down into activities which were distributed among the partners who were given responsibility for achieving them.

5. The Beta-Telco case study

5.1 The company
Beta-Telco is one of the largest telecom companies in Chile. The country fully privatised and opened the telecommunications services in the late 1980s and early 1990s, in what is generally known as one of the most successful cases of its kind. Success here is used in the sense that it resulted in a much improved quality of service and reduced cost of service for the population, and established the telecommunications service as part of the platform that enabled the radical transformation to efficiency and growth of the Chilean economy. Chile has for many years had one of the most competitive telecom sectors in the world. Beta-Telco, previously a state-owned land-line telecom service provider, has specialized in serving the corporate sector in its voice and data communications needs. Beta-Telco has also set up a successful mobile-telephony service but that is managed through a separate business unit, not included in this case study.

Beta-Telco has a high degree of penetration in the corporate market, where it masters close to 60 percent market share in its traditional telecom products. Its leadership team thus realized that in order to grow it would need to have new products to offer its client base and decided to incorporate IT Outsourcing Services to its product offering.

5.2 The Engagement
Responding to the strategy implied in the previous point, some three years ago Beta-Telco entered the IT Outsourcing Services market and won several projects, some of them large and highly visible. It created its
Corporate Services Division (unit of analysis of this case study) with its sales and delivery capabilities by recruiting individuals with experience in the service, and by setting up ad-hoc partnerships to tackle each opportunity, but without making the structural and organizational changes that entering this new product market required. So in 2007 it decided to engage consultants to design the required changes. In the diagnostic stage it quickly emerged that one area that needed attention was knowledge management and the leadership of Beta-Telco agreed to apply the strategy-knowledge management alignment framework given above to do so.

5.3 Applying the framework

The first step in applying the framework was to understand what the value discipline of Beta-Telco is. The this end the second section of the semi-structured interview guide was designed to make the informants give their individual interpretations on this issue (the first section was aimed at capturing background information on the informant and her role in Beta-Telco). Treacy & Wiersema’s (1995) “Value Discipline of Market Leaders” model was used to frame the discussion. The first two interviews were conducted by the researchers as a means of “fine-tuning” the semi-structured interview guide; the other fifteen interviews were carried out and documented by two consultants operating together. The remaining sections of the semi-structured interview guide touched on issues such as the informants’ view of Beta-Telco’s “go-to-market” strategy and how it tackles knowledge management. The interview transcripts were coded and as a result of the coding process the researchers were able to understand some shared values amongst senior management on what is the value proposition to Clients and place Beta-Telco on the Knowledge Management framework given in figure 2.

The resulting view of the Division’s value discipline was used as a straw-man to generate discussion in four workshops held between October and December 2008. The workshops were used to place Beta-Telco’s competitors on the 2 X 2 frame and to generate consensus on how it should tackle knowledge management, as described in the following section.

5.4 The outcome

Through the workshops a consensus was reached with the management team that Beta-Telco Corporate Solutions should adopt a value discipline of “customer intimacy”, and thus make a value proposition to Clients based on “best total solution.” By doing this it was thought that Beta-Telco would position itself to compete with large international IT Outsourcing providers operating in Chile such as IBM, EDS, TCS (that come to the market with global, standard, ‘leading practice’ solutions), by leveraging its better knowledge of the local market and its clients, to offer tailor-made solutions.

Discussion then moved on to how Beta-Telco should approach knowledge-management. The participants in the workshop applied the framework of figure 2 and, as expected, it emerged that Beta-Telco should favour a people-driven knowledge networks approach, rather than technology-based ones. It was decided to set up six Communities of Practice (CoP) on key knowledge areas for the company, one of which would be taken as a pilot, and the other five would follow incorporating lessons learned from the pilot. It was decided to give the pilot CoP a 5 month period for design and implementation, and that the 6 CoPs would be operating in a year. It was also decided that all 140 professionals in the Division would be encouraged to belong to at least one CoP, and that membership of a CoP would be voluntary.

6. Reflections

This research combination using previously published case studies to synthesize a KM framework and then apply it in two different empirical settings is novel. At Alpha-Consulting the framework provided a useful spring board with which to commence an in-depth conversation among the partners in the organization and this led directly to a useful result. From an evidence analysis and narrative creation perspective the Socratic Dialogue offers the case study researcher a way of overcoming the problem posed by polyvocal narratives of organizational change that typically emerge from individual interviews. This does not mean that the Socratic Dialogue substitutes interviews; it means that it is a complement to interviews.

At Beta-Telco the use of the Knowledge Management Framework together with Treacy & Wiersema’s (1995) “Value Discipline” model proved to be effective in helping managers visualize the link between business strategy and knowledge management strategy. The combination of individual interviews to construct a “straw-man” model for managing knowledge in the Division, with workshop type discussions within the
management team, also resulted in an effective way to focus discussion and arrive at a solution of consensus.

Moving from method to content, the paper highlights the dynamics of the competitive value of knowledge: The value of knowledge bases is debatable – they are static and by the time knowledge components have been uploaded, they may have lost some value. It can be theorised that knowledge objects, as competitive tools, have two dimensions of value. An absolute value (intrinsic value, derived from their verisimilitude) and a relative value (derived from few people knowing them). It follows that knowledge objects lose value gradually, at the rate that other people get to grips with them (erosion of relative value); but at a certain point in time they will lose value abruptly (loss of intrinsic value) as the knowledge object is falsified and superseded by a knowledge asset of greater verisimilitude.

From the perspective of this research project, the two management teams (some 50 managers and senior managers at Beta-Telco and 12 partners at Alpha Consulting) were deeply exposed to the Knowledge Management Alignment Framework and explicitly manifested that it makes sense to them, helped them visualise the link between strategy and knowledge management, and is straightforward to use, which is a powerful validation of the model by practitioners.

7. Conclusions, limitations and future research opportunities

The conclusion of this research is that the Knowledge Management framework developed in section 3 of this paper is partially validated and was of use to generate some practical guidelines to design knowledge management at two real-world organisations.

This paper thus contributes to the body of knowledge in the field of knowledge management by (a) establishing that there is a relationship between the business strategy that a knowledge intensive service firm wants to pursue and the approach to knowledge management that it needs adopt to support the strategy; and (b) proposes a framework to understand the link between knowledge management and strategy, and one that can be used by practitioners to support practical applications.

The paper also contributes to the development of research methods, by applying the Socratic Dialogue as a method for collecting and analyzing evidence in qualitative, case study research. It complements in-depth interviews and helps interpret polyvocal narratives on things and events. It could also prove to be a powerful means of building theory grounded on personal experiences. It is a vehicle to do research with rather than on organizations and thus useful in research approaches such as Action Research.

As in all case studies this research has the limitation that it is context dependent. The issues that emerge most strongly are those that were pressing the two organisations analysed at the time of the case studies. However, this research will continue through several fronts. On the one hand, there is an opportunity to do a review of the implementation of Knowledge Management at Alpha Consulting to see if new insights on the framework arise; on the other, it has been agreed to set up an Action Research project at Beta-Telco for the implementation of the CoPs from where there should arise opportunities to further develop the framework. In addition to this, it would be interesting to test whether this framework would work in other industries such as those with a manufacturing base.

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