

Confronting Conceptual Confusion and Conflict in Knowledge Management

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INTRODUCTION

The knowledge management group in a European pharmaceutical company had significantly cut time-to-market for new products by identifying how knowledge could be used more effectively in its research and development (R&D) process. Because every day saved in drug development meant additional sales of \$1 million, the group recognized that a critical next step was to change the systems and processes needed to support new patterns of knowledge use.

Business process reengineering (BPR) had become the “politically correct” way to sell senior management on performance-improvement activities and there was strong pressure to use it. But as a change management methodology, BPR was contradictory to the knowledge team’s underlying philosophy of knowledge management, as well as the new behaviors the team was trying to encourage.

Few people in the firm, however, understood the complex dynamics of knowledge use, and the small knowledge management team lacked the political support it needed to counter the pressures to use a reengineering approach. In the end, the R&D process was redesigned using reengineering methods. As a result, instead of helping to develop and share knowledge across key project teams that were determining product profiles and designing clinical studies, knowledge management became centered on the process of

loading documents into databases, and it had little strategic impact.

KNOWLEDGE MANAGEMENT’S GROWING PAINS

With the emergence of the knowledge economy, organizational knowledge is rapidly being recognized as a critical resource. In many firms, intellectual capital is now considered as important as financial capital. Increasingly, organizations are trying to manage these knowledge assets to support their strategic business objectives. In the process, a concept known as “knowledge management” has come into wide use to describe the development of tools, processes, systems, structures and cultures explicitly to improve the creation, sharing, and use of knowledge critical for decision-making.

But this broad definition has proved difficult to implement in practice, and a major problem has become evident. Attempts to manage knowledge are often hindered by a kind of conceptual confusion that has proved frustrating for many companies, because it feeds the potential for serious conflict between departments or business units. Frequently, the result is costly knowledge management initiatives that are disconnected from strategic objectives, mired in political battles, or organizationally inappropriate.

In the pharmaceutical company case described above, there was serious confusion



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about what effective knowledge management was, and how it related to the more widely accepted reengineering methodology. Knowledge managers, for example, believed that the BPR approach would remove any slack time in the development process needed for reflection and debate—critical activities for creating knowledge.

On the other hand, reengineering advocates saw knowledge management as just a fad that did not provide controllable performance improvements. Instead of trying to create consistently smarter people, reengineering advocates assumed that higher quality outputs would come from pressing everyone into the "best way" of doing things. The result of these conflicting views was a power struggle over how to manage knowledge more effectively, which in the end reduced the potential strategic benefits from improved knowledge sharing and use.

Our purpose here is to show why conceptual confusion and the resulting conflict, which are a natural part of the process of managing any major innovation, are a special threat to the implementation of a knowledge management strategy. After describing the sources of conceptual confusion around knowledge management, we will identify four types of conflict that can arise during the implementation of a knowledge initiative. The last section outlines tactics for handling these dynamics.

SOURCES OF CONCEPTUAL CONFUSION

Because it is built on the abstract, multidimensional concept of "knowledge," the idea of "knowledge management" is subject to considerable fuzzy thinking and misinterpretation. There are two major sources of this confusion.

A Concept With Many Dimensions

Whenever two people are talking about "knowledge management," the breadth and complexity of the subject make it likely that

the discussion is built on untested assumptions, different levels of analysis, varying levels of experience, and different objectives. For example, individuals may be focused on explicit or tacit knowledge, or individual or organization-level knowledge. And they may be thinking about different stages in a knowledge management process—creation, capture, sharing or use.

Even if both people work in the same department, the potential for misunderstanding is great, because individuals may have different characteristics of knowledge in mind. For example, when trying to improve the performance of their field offices, two organization development (OD) managers in a European insurance company had very different expectations. One assumed they would capture best practices in a shared database, whereas the other expected to use ethnographic inquiry to identify knowledge essential to effective performance.

Different Perspectives on Knowledge Management

Second, we have observed at least four distinct perspectives on knowledge management that must be integrated to implement any long-term strategy. These views of how knowledge should be used in the business are heavily influenced by an individual's role in the organization. These four perspectives, or interpretive frames, are:

- *Strategy/leadership perspective*—Senior executives see knowledge management primarily in terms of how it supports strategic business objectives, and the capital market's perception of related intangible assets. For example, the CEO of a global financial services firm worries about how to spread knowledge of new e-commerce business models throughout the company without inhibiting the need for adaptation of the models in local markets.

- *Knowledge content/practice perspective*—This view is held by experienced line managers who are most concerned with what knowledge is to be managed and how it is actually applied in practice. In contrast to the



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CEO's strategic view, the manager of a regional sales office is more likely to be concerned with what practical knowledge another regional sales office has that makes it a better performer.

- *Technology perspective*—Not surprisingly, this view is taken by those in information technology (IT) roles, who view knowledge management as a product of applying information and communication technologies. The director of information systems in a financial services firm, for example, focuses on using information technology to collect and mine data on customers' e-commerce transactions to produce new knowledge about customers.

- *Change management/reengineering perspective*—This is the view taken by organizational development and human resource specialists, or internal experts on business process reengineering. Although the specific approaches may vary, this view emphasizes the changes in work design, organizational structure, and culture necessary to leverage knowledge. The OD manager, for example, is concerned with how locally held knowledge about customers can be transferred to centralized manufacturing centers required by the CEO's e-commerce strategy.

In practice, of course, an understanding of knowledge management develops at different rates among individuals with different perspectives. And sometimes an individual may be able to fairly represent a couple of perspectives.

To complicate matters, however, there can often be considerable variation *within* these four perspectives, such as differences between individuals with a reengineering view of change management and those who focus on behavioral change. Someone with a reengineering view, for instance, will focus on the processes needed to capture and transfer explicit organization-level knowledge. In contrast, a manager with a behavioral-change outlook will see knowledge management more in terms of the sharing and use of individual-level knowledge, which is often tacit.

Thus, in practice, the meaning of "knowl-

edge management" for the organization becomes multifaceted and subject to a broad range of interpretations. Failure to recognize and legitimize these different views when trying to communicate with others is an important source of the conceptual confusion that undermines attempts to use knowledge more effectively.

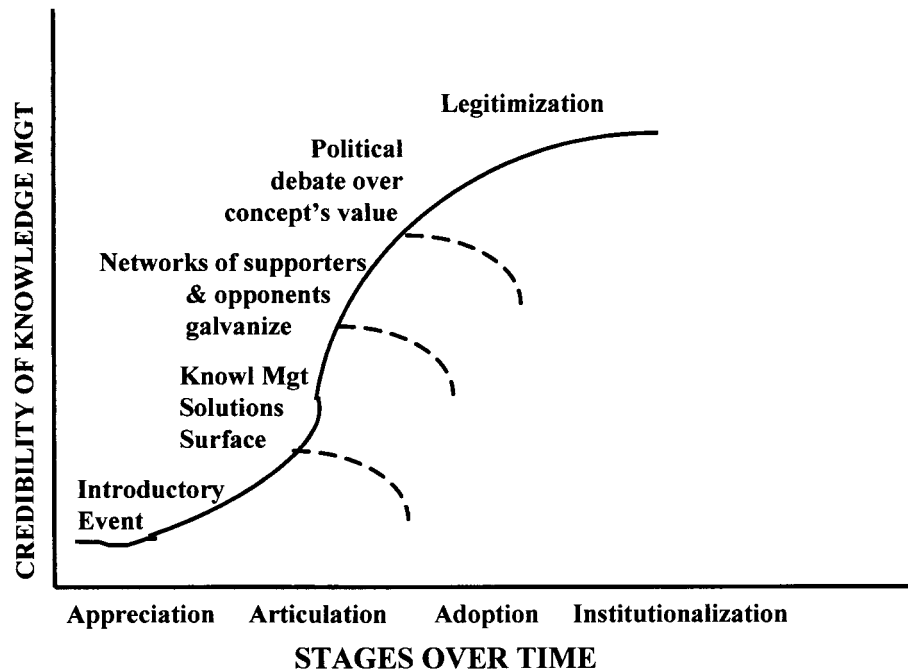
THE POLITICAL DEBATE AROUND KNOWLEDGE MANAGEMENT

Knowledge management, like other complex innovations, is ultimately a collective endeavor. Once knowledge is identified by some members of an organization as an important resource, the concept of managing knowledge must move through a social-political process to gain credibility and legitimacy as a source of power and resources. This means the concept must be debated and adopted by people in many different roles before it can become an integral part of the firm's strategy and culture. The process of legitimizing knowledge management is illustrated in Fig. 1, which adapts a framework developed by Don Schon.

Of course, explicit and implicit attempts to control knowledge have always been a fact of life in organizations. But the idea of "managing" knowledge highlights these struggles and legitimizes their discussion. In the long term, knowledge management will not have an impact on an organization's strategic objectives until it is subjected to a process of political debate to establish its value for the business. This ongoing debate will also determine how knowledge management concepts are used to gain resources and influence.

At each stage of the debate, the idea of knowledge management can potentially fall out of favor unless its sponsors understand the political dynamics involved in managing such strategic innovations. A key step in understanding these dynamics is to recognize the major sources of conflict that must be

Figure 1: Lifecycle of Institutionalizing Knowledge Management Concept



addressed to make knowledge management an integral part of a firm's strategy.

SOURCES OF CONFLICT

We have identified four sources of conflict that are likely to threaten the credibility of knowledge management, as both a new strategic perspective and a viable framework for performance improvement.

Struggles for Control of Specific Resources

One of the most common sources of discord to arise as knowledge management initiatives proliferate is the struggle for control over specific knowledge resources. For example:

- When Buckman Labs, a specialty chemical company, implemented an electronic network that enabled intensive knowledge sharing to help solve complex customer problems, the new system threatened many

employees who had developed considerable informal power by traditionally hoarding their valuable expertise.

- When one of its mechanical engineers sought cost information related to a design project, an automaker's finance department responded, "You're an engineer. You don't need to know that."

Struggles for control over specific types of knowledge are often conflicts between those with a content/practice perspective and those with a strategy/leadership view. In the Buckman Labs case, the CEO believed that sharing knowledge quickly to solve customers' problems was a critical element of the business strategy. In contrast, many of the firm's salespeople had a more parochial, individualistic view of knowledge shaped by the existing culture and how knowledge served them in their particular roles.

In situations like this, integrating a sophisticated change-management view is critical to successfully resolving the conflicts between the opposing interests. In fact, one of the most common mistakes in knowledge

management projects is to leave out the change management perspective, which means failing to anticipate and manage the new organizational and social dynamics associated with changes in how knowledge is created, shared, and used.

For example, when a drug development team developed new ways of creating and sharing knowledge that could speed up the R&D process, management failed to make the changes in structures and reward systems needed to support the new behaviors. As a result, the knowledge was not shared effectively. More importantly, team members became alienated by management's response. Some left to work for competitors.

In other cases, where there are conflicts between departments or business units—as in the case of the auto manufacturer's engineering and finance departments—both the strategy and change-management perspectives are badly needed. Without them, knowledge management's potential as a source of performance improvement will be seriously limited.

Ideological Conflicts

On a broader level, every organization where knowledge management is introduced must be seen as a complex cultural stew, consisting of distinct subcultures with an overlay of ever-changing performance-improvement ideologies, for example, TQM, reengineering, customer relationship management, and so forth. (Ideologies, as we are using the term, are shared sets of beliefs, norms, and assumptions about cause/effect relationships that determine how people diagnose, frame, and act on organizational issues.)

Conflicting subcultures, or ideologies, by necessity coexist in organizations with their contradictions remaining dormant and virtually unnoticed. Basic research and marketing, insurance and asset management, electronic commerce and traditional sales forces are just a few examples. Because a frequent objective of knowledge management is to share knowledge across functional and geo-

graphic boundaries, it is likely to serve as a lightning rod for conflict between different belief systems (e.g., R&D and manufacturing). Proponents of one approach or another may feel threatened as they are forced to confront their own assumptions about useful knowledge and who controls it.

Subcultures and improvement ideologies are simultaneously self-evident and very powerful, yet invisible, which makes them very hard to diagnose and accommodate. But signs of cultural and ideological conflict are relatively easy to find.

- When a financial services executive proposed a new knowledge management approach he was asked by the firm's organization development manager to fit the initiative into the Baldrige total quality framework "so people won't be afraid that the ideas are something new."

- An IT organization with a culture that valued knowledge embedded in processes built a knowledge management system for the firm's engineering division. But the engineering subculture was highly interactive and viewed knowledge sharing as a by-product of personal relationships. So they rejected the procedural, rule-based system.

- A global engineering and construction firm, where reengineering had become a dominant paradigm, designed its knowledge strategy mechanistically in terms of four processes, 15 subprocesses, and 53 subsubprocesses.

Trying to manage the ideology of knowledge management into a prominent strategic role without explicitly taking existing belief systems into account is likely to produce unexpected and unwanted outcomes.

For example, members of strong subcultures or advocates of other performance improvement ideologies will often unconsciously try to subsume the new concept into their own frameworks—as evidenced by the manager trying to interpret knowledge management in the context of the Baldrige TQM framework. Knowledge management sponsors need to be alert to this type of seduction, so they can make conscious choices about whether and when to accommodate the

more powerful ideologies and subcultures, or to intentionally resist attempts to incorporate their ideas about managing knowledge into old frameworks.

This latter approach inevitably requires strong sponsorship and a strategic perspective on the role of knowledge—even if such a perspective challenges existing ideologies. For example, if critical knowledge to be leveraged is tacit R&D expertise, reengineering will not be a useful approach no matter how strongly held its beliefs are throughout the organization.

Dealing with conflict created by differences in subcultures and performance improvement ideologies is largely a matter of diagnosis, accommodation, and resisting seduction.

It is very difficult to confront these conflicts head on because they are so abstract. Simply recognizing the potential for subculture and ideological conflict is an important first step. This makes it easier to spot strategies intended to incorporate knowledge management into an existing subculture or ideology, which effectively neutralizes its power as an innovative concept.

Major Integration of Different Units Required

Another source of conflict is the need to integrate highly autonomous departments, functions, or business units when implementing knowledge-management initiatives. The potential for conflict actually depends on the differentiation that exists between the units, and the amount of integration required to improve knowledge use in support of the business strategy.

Differentiation becomes evident in several ways. For example, Ford Motor Co.'s market research department produced "overwhelming evidence" in the 1970s that the minivan would be a huge success as a new product in the automobile market. But this marketing insight conflicted with what Ford's finance executives defined as valid knowledge. They contested the proposed minivan, labeling it untested and risky, and

the project was turned down. Of course, Chrysler went on to capture the lead in this major new market.

This story illustrates the potential for conflict when it is necessary to integrate very different perspectives on "valid" knowledge, such as marketing and finance, which are often needed for strategic decision making. How an organization deals with this type of conflict on an ongoing basis will seriously impact its ability to generate and apply new knowledge.

In another situation, BP Exploration has developed a desktop videoconferencing system to support knowledge sharing across its global operations. The system's success relies on management's heavy investment in coaching and education needed to use the system effectively for problem solving.

When a compressor broke in its Colombian oil field, for example, BP used the system to quickly connect experts from different units around the world to fix the potentially costly problem.

Coaching employees in how to use the video system helps them work through potential sources of conflict, such as differences in goals or time pressures. The videoconferencing capability also supports fast, repeated face-to-face interactions, which help overcome differences and reduce the likelihood of conflict among experts called together from different units to address a time-critical problem.

Conflict resulting from attempts to integrate people from different work units to leverage knowledge is largely a tactical problem. We will suggest some specific actions that can be taken in the last section.

Conflicts Over Control of the "Knowledge Management" Franchise

As knowledge management gains credibility in an organization, it becomes a potential source of resources and political power. Budgets for knowledge management grow, and new roles such as knowledge manager, director of intellectual capital, director of orga-

nizational learning, or chief knowledge officer are created.

Interest in control over knowledge management resources obviously changes over time and is driven by a variety of factors. One common source of conflict over these resources occurs when those in IT or change-management roles are seen as appropriating the concept for political gain. For example, in one financial services firm, both the corporate development and IT departments knew the company's chairman was very interested in the strategic potential of knowledge management. As a result, instead of integrating their approaches, both groups pursued very different types of knowledge management objectives that they felt would support their department's performance goals. Our experience shows that, given the conceptual ambiguity of knowledge management, groups will quickly define the subject in ways that give them political advantage.

Reflecting on the knowledge management life cycle shown in Figure 1, any serious infighting among knowledge management proponents is likely to strengthen the networks of those who oppose this emerging ideology. For example, if those advocating knowledge management can't agree on what it is they are supporting or how it should be implemented, why should those who are unsure of the concept's value, much less those with vested interests in other performance-improvement ideologies support the new approach?

Political infighting among proponents of knowledge management only diverts attention from what should be the primary debate over the concept's potential strategic value for the firm.

EFFECTIVE CONFLICT MANAGEMENT

In general, the process of implementing a knowledge management strategy requires working through conflicts between traditional views of knowledge use, which are embedded in existing subcultures and im-

provement ideologies, and new views put forth by knowledge management proponents.

Research by Bartunek and Reid suggests that successfully working through these conflicts produces a new shared perspective on knowledge that transcends the competing views. This new, negotiated, and shared perception of the role of knowledge is what will most influence new conceptions of work and the organization going forward.

Executives can take action in five areas to address conflict inherent in the process of developing this new perspective on the role of knowledge.

Diagnose Ideological Landscape

Initial knowledge management objectives should always be defined to support the business strategy. Once this is done, it is important to explicitly reflect on the firm's subcultures and key performance-improvement methodologies.

These belief systems may be viewed as stakeholders competing with the knowledge management approaches being proposed. For example, if executives at the global engineering and construction company had taken this step, they would have recognized the firm's dominant engineering subculture and the widespread belief in reengineering. Making the assumptions underlying these existing belief systems explicit would have helped the firm's leaders to clarify their evolving understanding of knowledge management and to see how it conflicted with current beliefs.

In practice, some of those involved in implementing the strategy for the engineering and construction firm simply conceived of knowledge management as a minor variation on information management activities, which easily fit existing ideologies. Others, however, viewed it as a new philosophy requiring radical restructuring and culture change.

Identifying dominant ideologies would have provided a useful backdrop for debating the emerging notions of knowledge man-

agement within the firm. It would also have enabled knowledge management sponsors to make conscious choices about the degree to which they could accommodate competing ideologies, and where they would strive to create a separate identity for their concept. In this case, knowledge management was all but swallowed up by a re-engineering ideology.

Articulating the power of existing ideologies can also help to clarify the role of executive sponsors, as well as the practical opportunities for changing patterns of knowledge sharing and use. If competing ideologies are not aligned with knowledge-management objectives, then either expectations must be reduced, or sponsorship commitment must be greatly increased to help bring about change.

Create Project Teams With Four Essential Perspectives

Implementing almost any knowledge management project is a complex process. Experience has shown that dividing such innovation tasks among specialists and trying to integrate them later in a sequential process is a flawed approach. Innovations around knowledge creation, sharing and use will be more effective if they are approached holistically. This means project teams should be designed from the outset to include people representing all four basic perspectives—leadership, context/practice, information technology, and change management. A common cause of failure in knowledge initiatives is leaving out the capabilities of one or more of these four perspectives.

Develop Process to Negotiate Conflicting Perspectives

Using cross-functional teams to work with the ambiguous notion of knowledge management virtually guarantees conflicting views on what needs to be done. Creating an effective dialogue among those holding different perspectives is the most productive way to negotiate differences about the cred-

ibility and purpose of knowledge management.

According to Bartunek and Reid, when people structure an effective dialogue for handling conflict, they do not allow one perspective to dominate, nor do they help participants find a compromise position. Instead, the structured interaction process helps support “the development of a new shared understanding that transcends either of the original perspectives.”

For this type of process, Skandia Financial Services uses hand-picked teams that deliberately mix people who not only have different functional roles and cultural backgrounds, but are also from different generations (from their 20s to 60s). By consciously managing conversations within the groups, they are able to effectively address critical strategic issues for the firm and generate new shared knowledge through intense dialogue among participants who have naturally conflicting viewpoints.

There is no magic formula for integrating perspectives. But an important first step is to make sure that different individuals or groups are aware that they see knowledge management differently, and to identify what those underlying differences are. Surfacing and acknowledging these different views is an essential activity, and an important side benefit is the continual attention paid to what defines a successful outcome for the initiative.

Change Conflict-Handling Patterns

Avoidance, passive resistance and tolerance are among the common strategies used to deal with conflict. But allowing these patterns to persist around a knowledge-management initiative will only reinforce the power of dominant subcultures and performance-improvement ideologies, and reduce the chance of developing new perspectives.

For example, knowledge managers in one pharmaceutical firm intentionally avoided dealing with the company’s powerful finance department while developing a knowledge strategy. This conflict-avoidance

approach, which was common in the firm, later proved costly when the chief financial officer used his influence to kill the entire knowledge initiative. Recognizing the power of the finance subculture, these knowledge managers would have been better served by designing a proactive change-management strategy to build support in the finance department.

Without training, Bartunek and Reid point out, most conflict-handling styles “split” competing ideas and recognize the validity of only one view to avoid the emotional and cognitive discomfort of acknowledging more than one perspective. But, by rejecting other views of knowledge management out of hand, by creating a win-lose competition, or by avoiding conflict all together, managers greatly reduce the possibility that a shared perspective can emerge.

Knowledge management sponsors should be particularly alert for conflict-avoidance tactics among key stakeholders, such as those in important IT or leadership roles. Conflict avoidance takes many forms:

- Making decisions without involving others;
- Refusing to discuss conflict openly;
- Smoothing over disagreements quickly; and
- Decreasing the frequency of meetings and discussions when tensions develop.

Avoidance promotes isolation and supports autonomy in the short run, but it also constrains change that is in the interests of the larger organization, for example, increased knowledge sharing between functions.

Passive resistance is a normal method for reacting to potential conflict in organizations where autonomy is highly valued. And, when both the structure and conflict patterns have historically supported autonomy, creating more integrated behavior can be a tremendous challenge. This is because passive conflict-handling behaviors so strongly reinforce autonomy. Any attempts to increase the integration of operations are likely to be viewed as changes imposed by senior management, instead of as initiatives mutually constructed by the groups involved.

Despite these difficult dynamics, research by Bartunek and Reid suggests there are at least three strategies for challenging autonomy and the way conflict patterns reinforce it:

1. Infrastructure systems can be redesigned to increase functional interdependence among units and to frustrate more autonomous behaviors.

2. Examples of new, more productive ways to behave when responding to conflict can be developed and widely communicated.

3. Norms supporting more cooperative and integrative behaviors can be developed by controlling the selection and training of the organization’s members.

If we assume that knowledge management can only gain credibility through a certain amount of productive conflict between old and new paradigms, then ignoring conflict-handling patterns may unintentionally have major negative impacts on a firm’s abilities to build its intellectual assets.

Address Special Dynamics That Support Conflict Avoidance

Executives also need to focus on two things that inadvertently support conflict avoidance in the innovation process. These dynamics will undermine efforts to build a shared perspective on knowledge management.

First, there is the increasingly difficult problem of “managing attention.” A key issue here, that can be inferred from Van de Ven’s work, is how to trigger and sustain the “action thresholds” of managers so they will continue to pay attention to a complex problem like leveraging a firm’s knowledge. When conflict seems inevitable in a particular area, and managers have many other things demanding their attention, it becomes easy to avoid the emotionally uncomfortable work surrounding knowledge management.

Second, there is the need to counter the great pressures managers feel to demonstrate progress, which often leads to the early abandonment of innovative ideas. At the global engineering and construction com-

pany mentioned earlier, executives were anxious to cease corporate funding for knowledge management and turn the fledgling initiatives over to the operating units. This desire existed despite the fact that knowledge management remained a very vulnerable idea, whose success would be doubtful without corporate leadership. The urge to show progress and move on to new problems can be very strong, but if moving on means avoiding conflict, then the motivation to do so will be even stronger.

Knowledge-management sponsors can do several things to counter the problems of managing attention and the need to demonstrate progress. First, they must continue to build and communicate a compelling business case for investing in knowledge management. This story must be told and retold. In addition, people's expectations that knowledge management is a long-term change initiative must be managed. Leadership must put to rest any ideas that this will go the way of quality circles, management by objective, and minicomputers.

Finally, every strategic change project needs some short-term wins to help sustain momentum. A knowledge-management initiative should be designed to produce these wins, both to demonstrate some return on the investment and to keep management's attention on the problem. There are no easy answers for dealing with these dynamics that divert energy from the conflicts inherent

in the innovation process. But explicitly addressing problems of attention management and the need to demonstrate progress at least keeps these concerns visible and increases the chances that executives will identify actions that can reduce the negative impacts of these dynamics.

CONCLUSION

Over time, there will be one critical difference between firms that effectively use knowledge management practices to support their business strategies and those that are limited to only operational impacts. This difference will be senior management's understanding of the complex social-political dynamics involved in institutionalizing the role of knowledge as a strategic resource.

Knowledge management is an inherently complex and confusing concept. This confusion feeds several types of structural conflict that are a normal part of any strategic change process. In the end, the ability of leaders to identify these potential conflicts and to help their organizations work through them will be an essential element of success. Facilitating constructive conflict between key stakeholders is critical for developing the level of shared understanding needed to make knowledge management an integral part of every firm's business strategy and culture.



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