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If the Strategy Fits, Wear It: Matching Strategic Change Efforts with IT Efforts

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If the Strategy Fits, Wear It: Matching Strategic Change Efforts with IT Efforts

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Abstract

Many organizations find themselves in a position of needing to change the manner in which they operate. Organizations may attempt to take advantage of opportunities in their environment or they may try to limit the impact of threats from the environment, and they have a variety of options from which to choose in order to successfully change. From a resource-based perspective (RBV), an organization could reconfigure existing resources, reconfigure with new resources, acquire new resources without reconfiguring them, or simply maintain a business as usual strategy. IT can benefit these change strategies in a variety of ways through knowledge creation, transfer, and protection. However, these four strategies have different characteristics that make certain types of IT use more appropriate than other types. Two characteristics explored in this paper, the degree of knowledge creation, transfer and protection and the degree of tacitness of the organization’s knowledge, are considered the most influential in determining the success of the use of IT in facilitating strategic change.

Introduction

Because of the inherent instability in the business environment today, organizations often find themselves facing the necessity to change their mode of operation. Opportunities to acquire new resources or to move into new businesses may arise, or threats from new competition or government regulation may become more salient. To face these challenges organizations may draw upon a variety of resources to which they may have access. According to the Resource-Based View (RBV) of the firm, an organization’s strategic change efforts have much to do with the acquisition and use of resources, such as management experience, or work force skill (Barney, 1991; Penrose, 1959; Wernerfelt, 1984). Organizations may draw upon one of four basic strategies to change how their business is accomplished. They may reconfigure existing resources, acquire new resources and reconfigure them, acquire new resources and not reconfigure them, or they may preserve the status quo and engage in a business as usual strategy. One key influence on the change strategy an organization will employ is found in its knowledge management strategy (Von Krough and Roos, 1996; Sveiby, 1997). Knowledge may either by created, protected, or transferred throughout the firm. Knowledge management strategies may be supported by IT, if one indeed understands the nature of the knowledge being transferred. This paper discusses how IT can support strategic change by assisting knowledge management and transfer. Our position is that some types of knowledge are more readily transferable using IT than others. We begin with a discussion of strategic change, move on to knowledge management strategies, and conclude by discussing the fit between IT and the particular knowledge management strategy used to support strategic change efforts.

Strategic Change Choices

According to the Resource-Based View of the firm, organizations have four primary choices in strategies for change. They may reconfigure existing resources, which involves using resources already owned by the organization in new ways. This strategy attempts to increase the performance of the organization by increasing the efficiency or effectiveness of various portions of the firm and to achieve a better fit with the current external environment by changing the way existing resources are used by the organization. Another strategy may be to reconfigure with new resources. This involves the novel use of existing resources, and those that the firm would acquire. Typically organizations will combine these sets of resources in new and different ways in order to increase the efficiency and effectiveness of the organization. Acquiring new resources without reconfiguring them is concerned with simply buying new resources and using them as they were designed. Organizations that engage in this type of strategic change do not focus on the use of existing resources. Rather, these organizations use new resources to provide increased efficiency and effectiveness. The final change strategy is called business as usual. This strategy involves performing activities as they always have been performed.

Knowledge Management and Strategic Change

Knowledge management includes the creation, transfer, and protection of knowledge within the organization (Von Krogh and Roos, 1996). Stated briefly, organizations that use a strategy of knowledge creation focus on creativity and experimentation to construct new knowledge that can be used to develop new products and services. Organizations that use a strategy of
knowledge transfer focus on moving knowledge through their organization in an effort to utilize it to its fullest extent as quickly as possible. Organizations that use a strategy of knowledge protection focus on keeping knowledge from being transferred to other organizations.

Different strategic change efforts require varying degrees of IT emphasis on each of these three knowledge management activities. A key determinant of the amount of emphasis that should be placed on each of the three activities is the degree of tacitness of the knowledge that is critical to the change strategy. As opposed to explicit knowledge, which is knowledge that is readily communicable because of its clear-cut nature, tacit knowledge is more difficult to express to others (Polanyi, 1967). Tacit knowledge is created through learning by doing, is difficult to transfer, and is easier to protect than explicit knowledge. Tacit knowledge, therefore, requires different handling than does explicit knowledge in order for competitive advantage to be created and maintained.

Understanding tacit knowledge is important to understand how strategic change may be accomplished, and hence how this may be supported by IT. We first address tacit knowledge as it impacts the change strategy of reconfiguring with existing resources. Because tacit knowledge is created through learning by doing, the organization has built up a cache of tacit knowledge concerning the existing resources. Therefore, successful change strategies that involve the reconfiguration of existing resources will likely focus on building upon the tacit knowledge already in existence.

On the other hand, a strategy of reconfiguring using new resources indicates a different degree of importance for tacit knowledge. The use of some existing resources suggests the importance of tacit knowledge in a similar manner as reconfiguring using existing resources, however the inclusion of new resources limits the applicability of tacit knowledge and provides for the role of explicit knowledge in the change strategy. Organizations do not possess tacit knowledge about new resources because they have not worked with them. Rather, organizations use explicit knowledge related to the new resources in order to develop successful strategies. Therefore, moderate amounts of tacit and explicit knowledge are important to reconfiguring with new resources.

To acquire resources and not reconfigure them indicates a relatively low importance of tacit knowledge and an increased role for explicit knowledge. Reliance on explicit knowledge obtained through the acquisition of new resources provides the organization with a strategy that any organization is capable of imitating provided that they acquire the same resources and use them as they were designed.

Finally, the business as usual approach indicates a relatively low importance for tacit knowledge, and for explicit knowledge. Although tacit knowledge is associated with the continued use of these resources, the value of this knowledge is minimal because of the limited need for change required of these organizations. Explicit knowledge has little role in this type of strategy because of the focus on tacit knowledge stemming from the sole reliance on existing resources.

Focus of IT for Strategic Change Given the Nature of Knowledge

The four change strategies identified in this paper utilize varying degrees of tacit and explicit knowledge, and this knowledge influences the amount of focus IT should have on the creation, transfer, and protection of knowledge as shown in Table 1. Our key assumption is that IT is most appropriate making knowledge more explicit (cf. Haeckel and Nolan, 1993) and therefore more imitable. On the other hand, careless use of IT can cause tacit knowledge to inadvertently be changed into explicit knowledge to some degree. This would, of course, reduce the inimitability of the knowledge, making it subject to copying by other organizations and limiting the competitive advantage to be gained from this knowledge (Mansfield, 1985). Precautions, through a high degree of focus on knowledge protection, should be made to make sure tacit knowledge remains tacit where desired.

<table>
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<tr>
<th>Change Strategy</th>
<th>Knowledge Management Strategy</th>
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<tr>
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<td>Low</td>
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Table 1. Strategy Appropriateness for IT

The change strategy of reconfiguring existing resources requires a high focus on the protection of knowledge because of the considerable dependence on tacit knowledge. The advantage of tacit knowledge is its inimitability (Hall, 1992), so IT efforts should maintain the tacitness of this knowledge and not attempt to make it too explicit. If the critical knowledge is made explicit it can be imitated more easily by competitors. Because of the reconfiguration of these resources, however, new knowledge and the transfer of that new knowledge are still somewhat important and moderate IT emphasis should be placed on these activities.

Reconfiguring with new resources combines both tacit and explicit knowledge in an effort to create something new and somewhat difficult to imitate. Therefore, high IT efforts are focused on both knowledge creation and transfer, and moderate IT efforts are focused on knowledge protection. The new knowledge needs to be spread throughout the organization quickly, so some effort needs to be made at making the new knowledge somewhat explicit. This is why only a moderate focus on the
protection of the knowledge is appropriate. The most important attribute of knowledge that provides for its protection is its tacitness, and if the knowledge is kept too tacit it will be too difficult to transfer quickly.

Acquiring new resources solely requires explicit knowledge that comes with the purchase of the resources. Knowledge creation is not part of this strategy, and because of the lack of tacit knowledge in this strategy, knowledge protection is not feasible. Therefore, rapid knowledge transfer is the primary goal and the means to gain a competitive advantage. Hence this strategy places a high focus on the use of IT for knowledge transfer, and a low focus on the use of IT for knowledge creation and protection.

The strategy of business as usual requires little in the way of new knowledge, its transfer, or its protection. Instead, the organization continues to work with the knowledge they already possess; the means of knowledge transfer and protection remain unchanged. In addition, because we are only interested in organizations that have a need for change, continued sole reliance on existing resources without any reconfiguration provides little value to the organization or to competitors who might be interested in imitating successful organizations. Competitors would be unlikely to attempt imitation of organizations that are performing activities of little value. Therefore, a low IT focus on all three knowledge management activities is appropriate to this strategy.

Although we have specified the degree of emphasis that should be placed on knowledge creation, transfer, and protection under various types of change strategies, recognizing the degree of tacitness of the organization’s knowledge is still a difficult endeavor. Managers are not usually aware of all the intangible knowledge possessed by their organizations. Continuous effort by managers to recognize the tacit character of the knowledge is necessary so that educated decisions concerning how much emphasis to place on creation, transfer, and protection can be made. Typically, managers have had to rely on their intuition to judge the degree of tacitness of knowledge resources. Recently, however, new metrics have been developed to give managers a clearer picture of the status of their knowledge resources. Sveiby (1997) and Edvinsson and Malone (1997) have identified measures such as competence-enhancing customers, value added per professional, and age structure as the means of determining the level and growth of knowledge in the organization. Although these measures are merely indicators of the knowledge and not a representation of the actual knowledge, they do assist managers in gauging the types of knowledge in the organization.

Conclusion

We have explored the importance of matching IT efforts with strategic change efforts in organizations. Specifically, we have described the relationship between change strategies and knowledge management strategies, and have assessed the degree of fit between IT and the various types of strategic change and knowledge management strategies. We have described how IT may be more appropriate for certain types of strategic change and knowledge management strategies than others, and the conditions under which IT would be most likely be appropriate. Added costs, lack of adequate knowledge creation and transfer, and imitation of knowledge by competitors can all occur when IT efforts are not appropriately coordinated with strategic change activities, taking into account the issues surrounding knowledge management.

References