Organizational Culture and Knowledge Management Efforts

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Abstract

An organization's culture is one of its most important attributes. Organizational culture defines the shared values and expectations it members. It can affect the behavior of the organization's members in positive or negative ways. In addition, having certain characteristics in an organizational culture can contribute to the success or failure of initiatives of many kinds. An organization's knowledge management efforts are one of those initiatives that are directly affected by the organization's culture. If an organization would like to implement an knowledge management imitative, it is vital that it encourage and cultivate certain cultural traits. This paper will define those traits and examine how they impact Knowledge Management (KM) efforts.

Organizational Culture and Knowledge Management Efforts

Most companies produce a product or service. However, the knowledge that is used to produce that product or service is infinitely more valuable. James Cortada writes, "If the modern corporation is largely a creator and a user of information, then facts and knowledge are among its most important assets" (p. 21). Furthermore, he writes, "Rarely does a corporation have a comprehensive approach to the management of its most important asset: information" (2011, p.21). It stands to reason that an organization's information and knowledge must be collected, stored, and formatted in such a way that it can be easily accessed, just as more tangible assets must be accounted for. How then, should an organization accomplish this complex task? The answer is by implementing a knowledge management program.

There are many definitions of knowledge management. Cortada, again, writes

> Simply stated, knowledge management is the identification, optimization, and active management of explicit or tangible informational assets (such as data physically stored in a computer or on a piece of paper) and tacit knowledge (information or insights residing largely in people's heads) (2011, p.24).

In order to accomplish this goal, an organization must mount a concerted, strategic effort to collect this information. The organization must also create a framework for storing it, as well as tools that employees can use to access it. Another critical success factor for a knowledge management effort is establishing an environment in which it can flourish. Some organizations will be able to do this easily, while others will need to undergo significant change in order for it to be successful. It is the purpose of this paper to examine what an organizational culture is, as well as to examine the traits of organizational culture that can contribute to the success or failure of a business's knowledge management efforts.

What is Organizational Culture?

In order to determine the effect of organizational culture on knowledge management, it is vital to understand a basic theory of organizational culture, and how it can be applied. There are many definitions and ways to examine organizational culture. Consequently, it is important to choose one that fits the needs of the company.

Ed Schein is one of the first researchers in the field of organizational culture. He provides an overview and a way to categorize cultures in his book *The Corporate Culture Survival Guide*. In it, he writes, "Culture matters because it is a powerful, latent, and often unconscious set of forces that determine both our individual and collective behavior, ways of perceiving, thought patterns, and values. Organizational culture in particular matters because cultural elements determine strategy, goals, and modes of operating" (1999, p.14). He categorizes three elements of culture that every organization has: artifacts, values, and tacit assumptions.

Artifacts are the easiest to recognize in a company. This aspect of culture describes what one can see from physical observation of the organization in action, such as how employees interact with each other, what they are wearing, or the language that they use. It can also apply to observable ways that the organization conducts business, such as the way that meetings are structured ot how many meetings occur. It can even be evident in physical attributes of the office, such as what is hanging on the wall or a particular floor plan. However, while artifacts are the reflection of the organization's culture in action, it is impossible to explain why things are the way they are through mere observation. This is because the real reasons for an artifact may be buried in the organization's history (Schein 1999). In short, artifacts can be seen as the effect of culture on an organization, while the other aspects can be seen as parts of the cause.

The second category, values, begins to unravel the whys behind the way an organization functions. For example, a company may state that one of its values is good, informed, decision making. That company may have an open floor plan, no doors on offices, and meetings in which every participant loudly and vocally contributes. In contrast, a second company may also value decision-making skills, but rely on carefully studying vast amounts of data before coming to a decision at the executive level before announcing what everyone is to do. How then, can the two organizations share the same values and perform them in separate ways? The answer is in their tacit assumptions (Schein 1999).

These tacit assumptions form the core of the organization's culture, and are the reason that it takes the shape that it does. They are created by members of the organization as it evolves and grows, based on shared experiences. Schein writes, "the essence of culture is these jointly learned values, beliefs, and assumptions that become shared and take for granted as the organization continues to be successful. It is important to remember that they resulted from a joint learning process" (1999). In our example above, the first company may have been founded by someone who found that conflict and hearty discussion improved the organization, and that is currently expressed in the way that employees make decisions. In contrast, the second company may have been founded by scientists, and that is the reason that it values careful data collection before making any decision.

Organizational Maturity

Schein's theory implies that it is necessary to understand where it lies on a scale of organizational maturity in order to fully understand its culture (1999). Schein categorizes an

organization's development into three stages: the start-up, the transformational organization, and the mature company (1999).

The first step on the organization's maturation, the startup, is characterized by the personal beliefs and values of the founder or founders. At this point in its growth, it is creating its culture, and lessons learned from the successes or failures become ingrained in the relatively small number of employees. The organization is in a fragile state here, and repeated successes will allow it to grow larger, while failures may cause it to change rapidly and drastically, or even go out of business entirely. If it does survive, those early lessons will become the basis of the shared tacit assumptions of the company (Schein 1999).

The second stage, a transformative organization, is characterized by change in structure, and in culture. The founders have less influence, and created power structures have more. In addition, the culture continues to evolve. Schein writes "But once cultural elements have stabilized, the change problem grows more complicated. It now involves having to *unlearn* beliefs, attitudes, values and assumptions as well as learning new ones" (1999, p. 116). At this stage, while the organization may be more stable financially, the culture is still developing.

Finally, the third stage of organizational development, is characterized by both structural and financial security. The founders may or may not still be involved, but are largely outside the existing power structures in the organization. It is also at this stage that cultural change efforts can be undertaken successfully. According to Schein, "cultural changes through planned change processes are more feasible in this stage, because culture is not longer linked psychologically and emotionally to founders and family members" (1999, p.146). However, it is important to link any changes to already existing cultural norms, because existing managers and employees may resist change that they feel is outside what has been successful for the company so far.

In short, organizational culture is a complex and ever changing force. In order to accurately gauge it, we must be able to define it in common, shared definitions. We must be able to define our observations of the company, and what its culture is based on: the artifacts, values, and shared assumptions that define the culture. We must also be able to analyze the organization's maturity level: is it a start-up, still in the early stages of development; is it in its midlife, marked by transformation; or is it a mature company, ready for long term change? In the next section, we will examine how these cultural elements can impact the success or failure of knowledge management efforts.

How Does Organizational Culture impact Knowledge Management Efforts?

A great deal of research has been done on both organizational culture, and on knowledge management, so there is little surprise that there is research that seeks to relate the two. One such study, performed at Baylor University by Maryam Alavi, Timothy Kayworth, and Dorothy Leidner, profiles the knowledge management efforts at a company that they call "Company A." Company A "is a large, global high-tech firm in the business of providing multiple lines of information-related products and services to a broad range of customers" (p.198). Having approximately 316,000 employees worldwide, Company A was chosen because it has a geographically diverse workforce, and this would allow the authors to study a wider variety of cultural components. In addition, it is very successful, and provides adequate resources for knowledge management efforts. As a result, any results that could be skewed by financial factors can be avoided (Alavi, Kayworth, Leidner 2006).

The authors collected information by interviewing company employees, choosing participants from a wide range of geographical locations, levels of seniority, job titles, and

department within the company. Each of these interviews lasted from 45 to 75 minutes, and

contained questions based examining the employees' experiences with the culture in Company

A. The participants were first asked about the culture in their organization, then about the

knowledge management approaches used in their individual workgroups. The interviewees were

also asked about the technology that they used for knowledge management, the barriers they

faced in effective knowledge management, and finally about the outcomes that resulted from

their use of knowledge management (Alavi, Kayworth, Leidner 2006).

Company A launched their knowledge management effort, known as Intellectual Capital

Management, or ICM, in 1995. It has two elements: "enterprise repositories and a technical

infrastructure called IntellectWeb" (Alavi, Kayworth, Leidner 2006, p. 201). Information for

these portals is collected as a standardized process, both by interviewing subject matter experts

and by collecting important documents digitally. All employees have access to these portals

using a web-based interface. As a part of these tools, teams have access to a virtual, private

meeting space called a TeamRoom. In addition, the company has created formal communities of

practice to assist in the dissemination of knowledge (Alavi, Kayworth, Leidner 2006).

In addition, Company A sponsored the creation of many communities of practice in the

organization. These communities of practice are an organized way for employees with common

goals, interest, and knowledge to work together. They are made up of leaders, subject matter

experts (SMEs) and other individuals who wish to contribute. Some of these are created with a

specific purpose in mind, and are led by a single senior manager. Others are more grassroots, and

are developed and led by groups of interested employees (Alavi, Kayworth, Leidner 2006).

The communities of practice that have developed in Company A have had varying levels

of success. Communities that have been successful have shared several common traits. First,

these groups are led by community leaders that are chosen by their individual community of practice. These leaders serve as gatekeepers for the group, admitting members as well as filtering the requests for information that flow to their subject matter experts. For example, when a member of the group has a need for information, he or she will send a request to the group's co leader. The leader will then reach out to a SME for assistance, who will then either provide the assistance or direct the leader to another SME for more information. At the end of this process, the original requestor is then required to codify the knowledge in a searchable database for the other members of the group. This results in a sense of ownership and collaboration for all members of that community (Alavi, Kayworth, Leidner 2006).

Communities of practice that were unsuccessful also had some defining traits. In general, these groups were tied to a single leader or manager who was driving the effort. Once that leader moves away from the team or initiative, it tends to fail almost immediately. According to the authors, employees "have noted differences in resilience of formal versus informal communities. For example, one informant observed that formal communities tend to be more vulnerable to organizational and structural changes (e.g., change in the executive sponsorship of the community). On the other hand, the emergent grassroot and mature communities tend to be more resilient to the changes in the formal structure of the organization" (Alavi, Kayworth, Leidner 2006, p.204).

As a conclusion, the authors note that a team's success in utilizing knowledge management is directly related to the culture that they share or develop. Teams that develop both stated values and tacit assumptions, such as valuing collaboration and winning as a team, will be more successful in their knowledge management efforts. Teams that are doing so because they are directed to in a top-down manner will often show slow adoption of knowledge management

efforts (Alavi, Kayworth, Leidner 2006). This shows that in order to effectively implement a knowledge management program, an organization must first seek to create a culture in which it will thrive, based on the values that are present in both the organization and in individual employees. A top-down, directive approach may appear to be successful at first, but without the individual driving it, it will fail.

A Cross-Organizational View of Culture and Knowledge Management

Another study, performed by Wei Zhang, Baiyin Yang, and Gary McLean, targeted two groups of HR professionals from a single city. These subjects came from a wide range of organization sizes, job titles, and levels of seniority. The authors created a survey that asked questions designed to rate the organizations' organizational culture, knowledge management practices, and overall effectiveness. The results from the responses allowed the authors to analyze each company on these dimensions (Zheng, Yang, Mclean 2010). This study is substantially different from the other, as it targets a wide range of organizations, rather than limiting the sample to employees of a single organization.

This study finds that effective knowledge management is fully dependent on the organization's culture. The authors write "This finding suggests that how well knowledge is managed is largely associated with how well cultural values are translated into value to the organization" (Zheng, Yang, Mclean 2010, p. 769). Beyond this, they found that culture impacts knowledge management more than any of the other factors of organizational effectiveness that they measured. They conclude that managers should focus on creating organizational values, as well as other tacit shared values, that encourage employees to understand the benefits of engaging in the knowledge management process, rather than solely enforcing compliance with

any knowledge management programs. However, they also recognize that their study had a

limited sample size, and a limited rate of return for responses, so their conclusions may be

skewed (Zheng, Yang, Mclean 2010).

Management Implications of These Findings

Based on these studies, it is clear that organizational culture is one of the most important

factors when implementing a knowledge management program. The culture is reflected in both

the stated values and the tacit understandings that employees and community members share.

How then can a manager or leader create an organization that values knowledge management?

Organizational leaders must carefully craft their actions to encourage the formation of

appropriate values with their teams, as well as ensure that each member of the community

understand the reason for their actions. David DeLong and Liam Fahey write of an organization

in which the leaders sought to encourage knowledge sharing in an engineering firm. Each year,

during the annual review period, each senior manager would ask his or her employees to show

something new. Those who did the best would be rewarded with higher review ratings. The

manager's' intention was for those who struggled with this activity to learn from those who did

well. However, their actions created an atmosphere of competitiveness and secrecy. Individual

employees would keep their learning secret from each other in an effort to top each other at the

end of the year. Another company encouraged knowledge sharing by including a section on each

employees annual review about how he or she was able to collaborate with other business units,

by asking the question "Show me where you've worked together with another business unit"

(DeLong, Fahey 2000, p. 117).

Another common shortfall of managers is caused by creating hierarchies within their organization. DeLong and Fahey give the example of an organization where the managers favored groups such as Research and Development over those such as finance. One of the engineers in the organization asked what the financial implications would be of a design change to a product, and a senior level manager said "You're an engineer. You don't need to know that" (DeLong, Fahey 2000, p. 117). Similar actions encourage a sense of separation between the two business units, and contribute to a lack of knowledge sharing. Instead, a successful company will encourage equality and collaboration between business units.

A third pitfall that can cause problems with knowledge management is the mishandling of errors. For example, a large construction company was having trouble building a repository for lessons learned, as employees were only documenting successful projects. However, the company had a habit of severely punishing even minor mistakes, such as targeting those who made the mistake for layoff. As a result, any mistakes that were made would tend to be hidden or deflected to another individual or organizational unit. In contrast, the US Army was more successful in creating such a database, because it adopted a different policy. The Army separates personal reviews from the debriefing process. It treats mistakes as learning opportunities, and evaluates its personnel on their ability to learn from and correct mistakes (DeLong, Fahey 2000).

Conclusion

Organizational culture is a complex and multifaceted aspect of any organization, made up of the values created and internalized by the members of the organization. It is also the most important defining factor for a successful implementation of a knowledge management program. In order for a knowledge management program to be successful, the organization must have a

mature culture, as well as one that promotes the sharing of knowledge. The most successful

organizations will have a decentralized, grass-roots movement leading to employees who are

self-motivated to participate fully in such efforts. Organizations that utilize a directive, manager-

led approach will be less successful. However, it is important for the company's managers to

carefully monitor their actions, as they can be key drivers in passing the company's values to

employees.

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