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Identifying Future Leaders Through Knowledge Management

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Abstract

Simply retaining knowledge within an organization is not enough to ensure its survival unless talented employees are ready to leverage that knowledge. Changing demographics within the petroleum industry raises many concerns for the coming decade including the identification, development and retention of an organization's future leaders.

An existing, advanced knowledge management (KM) community gives an organization's upper management a unique view into key employees' ability and willingness to solve technical problems, communicate, innovate, influence peers and lead group consensus. Disciplined review of collaborative efforts captures peer recognition and provides a more impartial means of generating a list of talented personnel who exhibit leadership qualities and technical ability. This informal list can be used to complement formal succession planning, generating a wider base of candidates and enhancing the selection process.

Examples demonstrate how this application of KM identifies 'natural thought leaders', evaluates candidates for key positions, and develops succession plans for future leaders who will drive the direction of the organization.

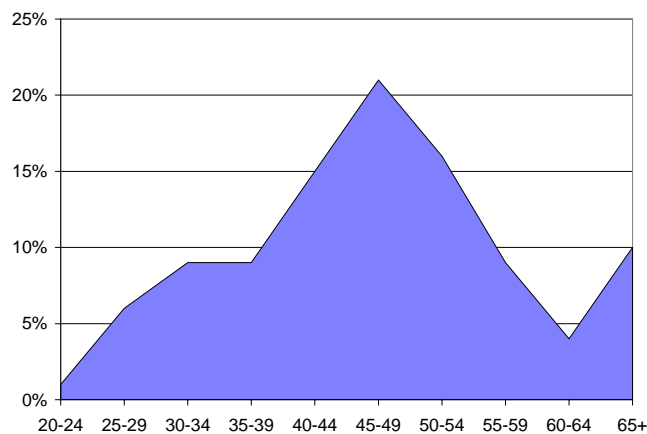
Introduction

Knowledge management (KM) has been the subject of many industry papers and articles, but we suspect there are as many or more untold examples of failed implementation of KM efforts in corporations as there are successful implementations. In our observations, one primary reason for failed KM initiatives is the nearsightedness of companies to realize the additional benefits that can be derived from collaborative KM systems above and beyond providing a more efficient means for employees to solve problems. The papers depicting successes generally focus on using a KM system to develop better technical solutions, connect geographically or

hierarchically disconnected experts, and improve processes, generating value chains and/or decreasing time to competence for newer employees. This paper looks at KM from an alternative perspective – using a KM system to identify, evaluate and develop emerging leaders.

The industry's challenge of recruiting, developing and retaining a global workforce is well documented^{1, 2, 3, 4, 5, 6} and frequently discussed. Charts showing the age distribution of professional organizations such as SPE (Figure 1) are often used to illustrate that the majority of the industry population is approaching retirement age, and either an insufficient inflow of younger professionals is available and/or there is too little time to develop younger workers to fill the void left by outgoing personnel. These eventual retirees frequently are the most experienced, knowledgeable employees in the organization and will leave with irreplaceable expertise in the form of tacit or undocumented knowledge, unless there is a system in place that combines organizational ability to learn, retain key staff and make a knowledge-sharing culture a reality.⁸

Figure 1: Percentage of SPE Members by Age in 2004⁹



Retaining the "lessons learned" accumulated through years of experience is only part of the dilemma. Knowledge retained by an organization without new capable leadership to leverage that knowledge will never benefit the company. Succession plans can be a first line of defense in attempting to ensure that replacement candidates are identified for all key employees. However, even if these programs rely on managers and other key employees from locations wherever the company does business, there is still potential for personal bias when asking

any key employee to nominate a successor for a role. Better or equally suited candidates unknown to upper management may not be identified.

Another potential drawback may occur when an employee recognized by peers as a “rising star” is nominated by several managers and is placed on more succession plans than that individual can possibly fill. Like personal bias when identifying potential successors, one employee nominated to succeed too many roles is an indication the organization is not reaching far enough into the employee population to identify a more diverse group of future leaders. If an organization is to survive, it needs to develop strategies to ensure that the best candidates are identified to fill key roles. These strategies should promote a genuine meritocracy and improved diversity (in terms of role, training, ethnicity, gender, etc.) within the management structure.

Specific ways that KM is being used as a tool to improve succession planning methodologies include:

1. Using new techniques to identify the right people to lead the organization in the future using collaborative KM tactics.
2. Using KM to help evaluate candidates for open positions.
3. Using KM in succession planning.
4. Integrating KM's role in career and performance planning
5. Using new methods for developing emerging leaders.

Definitions

There are many definitions for knowledge management. Halliburton prefers “a systematic approach to getting the right information to the right person at the right time.” This is an adaptation of the American Productivity & Quality Center's (APQC) definition¹⁰: “A set of strategies and approaches to create, safeguard and use knowledge assets (including people and information), which allows knowledge to flow to the right people at the right time so they can apply these assets to create more value for the enterprise.”

The company's KM approach is centered on developing and supporting communities of practice that meet the needs of the organization¹¹. While providing access to common portal processes and tools, it is believed each community has unique needs and distinct business objectives. However for the purposes of this discussion, the precise definition of KM adopted by a company is not critical. What matters most is the level and type of collaboration among employees that a KM system enables.

At the heart of these communities is the ability to communicate and collaborate around relevant topics. The collaboration tool enables anyone in the organization to:

- Ask a question
- Push knowledge (best practice, idea, etc.) proactively to the community
- Reply with an answer or opinion
- See the original question/issue and all replies
- Learn on demand by searching previous discussions and accessing managed content.

Issues involving one or more communities can be shared to increase collaboration and gain additional perspective. While these discussions typically involve technical or operational problem solving related to the communities, we see an increasing amount of collaboration occurring around planning, innovation and strategy.

A dedicated KM team for each community provides full time administration to facilitate that community's KM effort. The facilitating team's primary responsibility is to oversee the collaborative discussions. Essentially, they ensure questions receive answers, issues are resolved, and stakeholders are made aware of developing challenges, solutions and opportunities.

Each community of practice in the company is developed using the same essential components and methodology. Once initiated, how a group develops and applies that community to their particular business issues can vary widely. This paper focuses on the experience and practices of the Baroid Fluid Services community (a community devoted to a specific Halliburton product service line). This community is the first in the company to pioneer the use of KM – specifically collaborative activity – for identifying emerging leaders and succession planning.

The company's broad definition and underlying goal of knowledge management, “a systematic approach to getting the right information to the right person at the right time”, allows a broad interpretation of the *what*, *who* and *when*. The Baroid KM team chooses not to limit the *what* to technical information, the *who* to technical roles, and the *when* to after a problem or issue has been raised.

In fact, we frequently see collaboration and information sharing on issues that are non-technical but important to the community, such as discussions on strategy, HSE, open positions, excess equipment, etc. Employees in diverse roles (technical, support, lab, business development, management, etc.) from across the organization collaborate and communicate on a daily basis. We frequently see emerging leaders and the community as a whole answering questions that most users have yet to ask.

Identify future leaders

One can think of KM – specifically collaborative discussion – as upper management's window into company operations¹². By scanning the contents and comments in recent discussions, managers can quickly take the pulse of the organization. This window isn't limited to current operational challenges and technical solutions; it also provides a unique view into the abilities and motivation of employees that collaborate.

The collaborative discussions are self-policing in that incorrect, erroneous or irrelevant contributions are corrected, clarified or dismissed by other contributors. All exchanges are kept positive and constructive through facilitation by the administrative team. Employees that post inaccurate information or hold misconceptions about technical issues still learn from an exchange in the community but are recognized

as requiring additional guidance from the community at large. Emerging thought leaders tend to be employees that naturally garner the respect of their peers for innovative thinking and technical ability. The feedback posted by other community members frequently show support for the ideas and solutions posted by these emerging leaders. As natural thought leaders in the organization, it follows that these employees contribute more frequently and with greater detail than most other community members.

Since the collaborative nature of the communities of practice provides a window into the operational issues a company's employees are trying to resolve for customers, it also provides some visibility to individual employees' abilities, regardless of where the employees may be based. For the first time, employees in locations far from corporate or regional management have the opportunity to showcase their knowledge and ideas relating to any aspect of the organization's business. Collaborative tools enable anyone to positively impact the organization regardless of their current role, whether in engineering or support roles such as lab, business development, marketing, R&D or supply chain management.

Managers can learn a great deal about individual employees by reading what these employees contribute. Their contributions demonstrate characteristics (or lack thereof) found in emerging leaders. Examples of these characteristics can be found in Table 1.

Table 1. Examples of emerging leader characteristics

| TRAIT | MEASURE |
|---------------------------------|--|
| Technical ability | Technical accuracy of content of contributions |
| Persuasiveness | Ability to influence others and lead group consensus |
| Ability to communicate | Quality, clarity and ability to teach others |
| Willingness to share knowledge | Frequency with which contributions help share best practices and other experience |
| Willingness to ask questions | Frequency and type – i.e. technical, rhetorical, etc. |
| Ingenuity | Original thoughts or tying together divergent ideas |
| Technical or thought leadership | Ability to lead others to develop new and unique applications or consider ways of thinking |

The community administrators can also be an immense help to managers in this arena, since no manager is expected to read all exchanges in every collaboration. However, the administrative team reads every comment and question posted to the collaboration tool. The team also talks with members of the community frequently. They track community and user metrics. In short, they are the community's eyes and ears, and

as such have additional insight as to who the emerging leaders are.

This makes active administration of the community invaluable in helping upper management identify these potential emerging leaders – in terms of quantity of contributions and/or quality of thought leadership – during regular management reviews of the community and KM effort. Examples of great initiative, ingenuity or performance derived from collaborative efforts are shared with the organization and management as case histories.

Using this information to review the contributions of emerging leaders provides a more impartial means to generate a list of talented leaders and technicians. Rather than depending solely on recommendations from other managers or rigid career paths to select candidates for new roles, the organization is now looking at what the entire community has to say regarding (or how it reacts to) an individual's abilities and collaborative contributions. The result is a wider base of candidates with diverse backgrounds and global experience that may have not been considered for advancement through more traditional organizational channels.

Evaluate candidates for open positions

Participation in the community should not be the primary consideration when evaluating candidates for open positions. But if candidates are otherwise similar in terms of experience and training, an evaluation of a candidate's participation and leadership in the community can provide insight as to their potential leadership qualities in the wider organization and can be a useful point of distinction:

The frequency of participation is one of the criteria evaluated, but is not the most important criteria in these circumstances. While easily quantifiable measures (Table 2) are tracked by dedicated community administrators and do demonstrate some of the emerging leaders' characteristics listed in Table 1 (mainly willingness to share knowledge), it is more important to consider the subjective characteristics that are more difficult to measure.

Table 2. Examples of Individual User Metrics

| METRIC | MEASURES |
|-------------------------|--|
| Discussions created | Number of new discussion items created indicates number of solutions being sought or concepts or documents pro-actively shared |
| Replies posted | Number of responses posted to existing discussion items indicates willingness to share and help others find solutions |
| Discussions read | Number of discussion items read indicates willingness to continue learning |
| Number of days accessed | Number of days the user accesses the community portal indicates if the employee consistently embraces KM values |

Depending on the role, some traits are obviously more critical than others. Persuasiveness and ability to communicate should have more weight in a business development or marketing role. Ingenuity and willingness to ask questions may be more important in a research and development role. A product champion needs technical ability, willingness to share knowledge and ability to communicate well.

For example, an employee with very high participation rates (in terms of discussions created, replies posted and discussions read) and demonstrated innovation and technical / operational problem solving skills was recognized by his peers as a potential thought leader and brought to upper management's attention by the community administrators. This recognition had a major impact on his selection as the product champion for two critical technologies. Another employee was selected as a member of the community administration team largely because of the initiative, participation and ingenuity he displayed in collaborative discussions and his active promotion of the community in his local area. The management responsible for hiring these particular employees acknowledged that they might have never considered these individuals as candidates for filling these roles without the recognition they received through their participation in the KM community.

Succession planning

During periodic review of succession plans, the candidate list for any position can change or evolve for a variety of reasons. For instance, employees on existing plans may have already accepted other roles in the organization or chosen other career paths in the organization that he or she felt better aligned with their long term goals. Therefore, the need to identify new candidates for potential placement into key roles is a never-ending concern.

As noted earlier, relying on existing key personnel to nominate their replacements has its limitations from a personal bias standpoint, and thus may lead to overlooking equally or more qualified employees through lack of visibility. To circumnavigate the inherent limitations of the *who-knows-who* approach to finding successors and instead adopt an approach that allows us to examine *who-we-have-missed*, the KM community administrators provide a list of Power Users. This quarterly list is comprised of high-impact employees that are recognized for above average performance based on the various KM user metrics defined earlier.

The Power User list provides an alternative vehicle for employees making an outstanding effort, positively impacting the company to gain recognition for their efforts, independently from immediate supervisor acknowledgement. During the periodic review of succession plans, the Power User list is consulted to see if there are any employees not previously considered that might make good potential candidates to include on succession plans or for further development. Generally, this begins some dialogue among managers regarding employees on the Power User list, and with the help of the KM community's administrative team, employees on the list can be more thoroughly evaluated.

There are many other criteria that the company uses to determine if an employee is a good match to fill key function, but the Power User list has proven useful as a "reality check" to ensure enough diversity in candidates.

Just as in using KM activity to evaluate candidates for open positions, when managers develop succession plans they should consider the critical traits necessary to fill key roles (Table 1). This is particularly important when considering successors for leadership roles that set the direction for the entire organization. Based on these critical traits, collaborative activity can help demonstrate the best fit between identified emerging leaders and key roles. An evaluation of employee contributions may also identify traits that need additional development before the employee is ready to take on the key role.

For example, a manager in Norway used several KM tools and collaboration in several communities to prepare for a major cross-product service line tender. His approach is innovative and widely identified as a best practice for the organization. With the increased visibility of his skills and abilities, he was included in succession plans for several key positions.

Career and Performance Planning

Company employees identify their own career aspirations in their annual performance plan. Part of the exercise is identification of development needed to prepare for targeted roles. To support these efforts, the Baroid Community provides access to general career paths and links to specific job descriptions.

The ability to participate in a global community also enhances all employees' understanding of the global organization by providing exposure to other roles, regions, and technologies through collaborative discussion items. This additional perspective and understanding can help employees better envisage how their own careers might develop and can encourage aspiration in and retention of future leaders.

The collaboration tool also enables distant employees to take charge of their career by actively boosting the visibility of their skills and abilities. New employees in the US and Kazakhstan have mentioned they have benefited greatly from KM collaboration, not only in the operational sense (from the community expertise they can access and learn from), but also professionally from the opportunity to receive global recognition for their hard work.

Several managers have made KM participation a formal requirement in employees' annual performance assessment and career development plans. The performance measures vary from area to area, but tend to be quantitative in nature (such as the examples listed in Table 2).

Developing identified leaders

Everyday exposure to a broad spectrum of both technical and non-technical topics that impact the organization encourages more rapid and rounded development of identified leaders as it does with every other community member that participates. In

general, the KM community's administrative team shares the benefits of the KM effort and in particular, shares outcomes and lessons learned from specific collaborative discussions with the entire community through value moments, case histories, monthly reports and training events (from management reviews to curriculum in courses for new engineers). This supports a goal to disseminate captured knowledge rather than simply capturing knowledge.

Since future leaders are more likely to be among the most active participants, they will receive the maximum benefit of a broad global awareness of challenges, successes, lessons learned, customer needs, new technology, organizational structure changes, strategic direction, etc. This awareness naturally accelerates their knowledge, potential and empowerment to make decisions and act on information as opportunities arise.

We recognize that future leaders need a strong personal network to effectively affect change and advance within the organization. Participation in the community also helps employees develop a personal network within the organization¹⁰. This network is critical in creating trust and increased flow of information across the entire enterprise. Personal networks also help employees become aware of and compete for new positions within the organization.

As organizational culture and structures change, it is becoming increasingly important for employees to share knowledge. Some managers have made it clear that they expect their employees to use the community (and the community's tools) as their primary means of finding and sharing information.

One such manager overseeing global operations uses the community to help lead his organization by making content available, communicating changes in organizational structure, asking for feedback and providing clear direction for his business. By doing so, he ensures his employees better understand business goals, operational processes and technology – in short he is developing his organization.

The emerging leaders at the forefront of this cultural change need additional development to further leverage the knowledge they gain and share. As discussed above, they may also have specific development needs associated with corporate succession plans.

As an example of how KM has identified and helped provide emerging leaders with additional development, our upper management team recently used a list of emerging leaders (identified by the KM administration team) as a selection tool to recommend candidates for a week-long technical and training conference with limited attendance. The belief is that these emerging leaders are the ones most likely to act on the information they receive as well as serve as a natural conduit between the conference and the rest of the organization.

Conclusions

Simply retaining knowledge within an organization is not enough to ensure its survival unless talented employees are

ready to leverage that knowledge. Emerging leaders demonstrate their ability to create and leverage knowledge, build group consensus and innovate through their contributions to the community. These leaders use KM to positively impact their customers and our entire organization on a daily basis.

A dedicated KM support team can assist management identify and develop these emerging leaders. This leads to a larger and more diverse pool of candidates from around the globe for open positions and succession planning. Review of critical traits and peer recognition provides upper management with a more impartial means to select candidates.

Halliburton's definition of knowledge management, "a systematic approach to getting the right information to the right person at the right time," allows us to be pro-active and liberal in interpreting just what the right information, right people and right time are.

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