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Ethnography and the "Age Wave": Knowledge capture for succession planning

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The "age wave," or aging of the population and concurrent increase in retirees, is creating a loss of knowledge unlike that experienced in the American work force to date. Since many Baby Boomers are loyal employees who have worked for the same employer for several decades, the knowledge, both tacit and explicit, contained within this single generation is vast and integral to the continued success of many organizations and industries. While Knowledge Management (KM) has become a priority for many organizations, several studies have shown that current KM methods and technologies have not proven effective as a means of transferring knowledge between workers. Ethnography offers some advantages as a technique to capture, record, and transfer tacit and explicit knowledge. This paper uses two case studies to examine how ethnography and a co-creative method can b e utilized to assist with knowledge management and succession planning.

INTRODUCTION

Referred to as the "age wave," the aging of the population is creating both opportunities and struggles within industry and government circles (Dychtwald and Flower 1990). With the retirement of the Baby Boomers, the workforce is currently experiencing a loss of knowledge greater than ever before. David DeLong, author of *Lost Knowledge: Confronting the Threat of an Aging Workforce*, notes that such a widespread retirement of experienced workers could lead to an unprecedented loss of expertise in the work force (2004). Furthermore, the type of knowledge this generation of retirees holds is unlike that seen in the past and is difficult to replace or train for in the future. Baby Boomers are a generation characterized by loyal employees who often spent numerous years working for a specific company. Moreover, experts estimate that 90% of knowledge in an organization is situated within peoples' heads rather than being recorded in a formal mechanism (Wah 1999; Bonner 2000; Lee 2000). The knowledge, both tacit and explicit, contained within this single generation is vast and important to the future of many industries.

Ethnography offers an exciting opportunity to capture some of that knowledge in a way that has not been fully explored in business. This paper examines the use of ethnography as a method of knowledge capture for "seasoned experts" who are nearing the end of their time as working employees. In addition, rather than simply capturing and storing knowledge, it is crucial that a co-creative method is employed to use the captured knowledge to create training programs that are innovative, inspiring, and effective. Two examples of this approach are presented and examined from both the education and aviation industries.

TECHNOLOGICAL APPROACHES TO KNOWLEDGE CAPTURE

Many organizations discuss the importance of knowledge management for their continued success. Because of the growing concern regarding the loss of knowledge, many different methods of knowledge management have been developed (Beazley, et. al. 2002, Hertoz et. al. 2000). Knowledge management (KM) has been defined as:

...a systemic and organizationally specified process for acquiring, organizing and communicating both tacit and explicit knowledge of employees so that other employees may make use of it to be more effective and productive in their work (Alavi and Leidner 1999:6).

Traditional approaches to KM include using the employee to train his/her replacement. An alternative method involves re-hiring the employee as a contractor or part-time employee to maintain his/her knowledge but reduce costs. More recently, technological approaches to knowledge management have been developed such as web-based databases, multi-media presentations, and web-based communities or forums to exchange information (Lampl 2004:5). While there are several technological approaches available for knowledge management, several studies have documented the difficulties of using these approaches (Nycyk 2011, Lampl et. al. 2004).

While KM is a priority in many organizations, there are difficulties using technology for KM (Nycyk 2004, Lampl et al. 2004). One of the problems identified by Nycyk is that people are reluctant to use such technology, which ends up being viewed as "repositories and are often ignored by project staff" (2004:6). Another problem identified with KM technology is usability. If the system is not easy to use where people can readily find information they need, they will not use it. Nycyk concludes that most knowledge is received orally and committed to memory as tacit knowledge, making codifying into a technological system very difficult (2004:9). Styhre and Gluch (2010) made a similar observation based on KM in Scandinavian construction companies. They stated that formal procedures have been created to maximize KM; however, most sharing tends to take place more informally through personal communications. Lampl also notes the difficulty in recording tacit knowledge in technology-based forms of KM (2004:6). The difficulty in recording and transferring knowledge means that few organizations have managed to successfully share explicit and tacit knowledge (Bonner 2000).

THE BENEFITS OF ETHNOGRAPHY IN KNOWLEDGE CAPTURE

The benefits of an ethnographic approach as one component of the knowledge capture process are many. First, Lampl et al. (2004) note, formal mechanisms for knowledge capture are not likely to record the tacit knowledge, or how things are *really* done, within an organization. Whether it is a simple short-cut that saves time or a habitual way of working, employees are often not fully aware of the steps they take or the amount of "know-how" they have that is informal (Lampl et al. 2004). However, when someone is observed while working, the ethnographer is capable of capturing tacit knowledge whether it is through

video recording, observation, or discussing what the ethnographer has observed. Compared to more traditional methods of knowledge capture, ethnography allows a much richer understanding of tacit knowledge.

An ethnographic approach is also crucial for uncovering the consistencies and inconsistencies between what one says they do and what one actually does. Again, ethnography is able to get at the tacit knowledge that may mean the difference between formal policies and the successful implementation of those policies. Ethnography allows one to uncover the instances where formal policy may not be followed exactly to the letter.

Using ethnography in an organization or industry also helps to personalize techniques, methods, or work styles that might typically be taught in a more theoretical manner. For instance, as one of these case studies will show, using ethnography to capture knowledge from successful teachers resulted in videotaped examples and descriptions of teachers implementing theories, techniques, and methods that teachers have likely been exposed to previously. However, ethnography offers the opportunity to see how these elements come to life in a particular school and with specific teachers.

Observing, recording, and analyzing the work of high performing individuals has many benefits. However, the output or deliverable of the ethnographic process must be useable by others or it will have the same drawbacks as other technological forms of KM. This is why we are utilizing a co-creative process to develop a training program to share the knowledge, techniques, and experiences of high performing individuals with their peers or successors.

CO-CREATING TRAINING PROGRAMS

As several authors discuss in this volume (and has been pointed out in past EPIC papers), it is important for ethnographers to move beyond simply recording and documenting, to developing new methods to assist with transitions currently taking place in the work force (Messervy and Werner 2012). Messervy and Werner argue that we can be most effective by working with our clients through the research phase and into the implementation process. Co-creation, "or the approach of actively involving all relevant stakeholders in the creative process," takes ethnography to the next level. Since stakeholders are the true experts and will be the people who decide when and how to implement the recommendations developed from ethnographic research, it is important to work with them to create a successful implementation project (Messervy and Werner 2012).

The co-creation approach is utilized in this project in the planning phase, the ethnographic process, and particularly in the development of a training program based on research findings. I developed the initial research plan, but it was discussed, reviewed, and revised based on comments from the rest of the team, which included the project managers for both clients and my firm. During the ethnographic research process, I (an ethnographer and anthropologist) worked with the participants, project managers in both organizations, and the creative team. Most of the teamwork conducted during the ethnographic process had to do with scheduling and coordinating times for shadowing and observing the teachers. Then I analyzed the data gathered and developed outlines for the training programs based on the findings. The teams are reviewing the training outlines and will work together to develop the final trainings.

CASE STUDIES

Two ethnographic projects are explored in this paper. The first is an "Inspiring Teacher" program that documents the work of four highly skilled and successful teachers and administrators at a private school in Texas. The second focuses on a high performing manager in an international aviation organization. In each of these instances, clients were concerned about the loss of highly successful employees and their knowledge. A program was developed that included participant observation primarily through shadowing, as well as, semi-structured interviews as a method of capturing knowledge. Video recording was utilized to capture some of the interviews and observations. The data was then analyzed using a thematic approach to develop training programs that will be utilized to preserve the high performers in their work settings and train future teachers and managers. The remainder of this paper focuses on the process utilized, the problems experienced along the way, and offers advice for using ethnography as a component of succession planning and knowledge capture.

Both of the organizations for which this method was utilized were ongoing clients of my firm, Yaffe Deutser. The firm has worked with these organizations for several years in a variety of capacities. It came to our attention that both were concerned (as are many of our clients) with the impending retirements of several of their key employees. Based on our indepth knowledge of each of these organizations, including their KM and succession planning practices, the firm suggested utilizing ethnography as a method of knowledge capture. The agreed upon deliverable for both clients was a training program that included a video component. The organizations include an elite private school in Texas and an aviation company that works in both the energy and medical industries.

Case study #1: Elite, private school in Texas

There is a concern that the school is loosing many of its talented teachers because of impending retirements. The school had several top faculty members and administrators retire in May after more than thirty years of service, and they expect to have many more retirees in the coming years. Many of these teachers have taught current students as well as their parents and are viewed as an integral part of the school. We were hired to use ethnography to capture insights and expertise from four teachers before they retired this year, and we plan to repeat the process with 2-3 teachers each year for several years. Thanks to a generous donation from an alumnus and current parent, the school received funds for this project.

The project group consisted of myself as the only researcher/ethnographer, our videographers, our graphic designers, the project manager, our liaison with the school, school administrators, and the teachers and administrators who were the focus of the project. The team worked conjointly to determine who would be interviewed. I conducted the main observations and interviews with the primary teachers. We are in the process of

developing the training program, and the team will work together to ensure the training program is relevant without duplicating existing training efforts.

Case study #2: International aviation company

The aviation company has many leaders who have been with the company for 30-40 years. There is a great deal of concern about impending retirements that will lead to a loss of senior personnel. Because of the structure of the company (They have numerous bases throughout the United States and elsewhere in the world.), many of the senior leaders do not office in the same location and are not fully aware of exactly what the others do. There is a sense that they are all very good at their jobs and because they each take care of their responsibilities, they do not worry about what the others do in their day-to-day work. This creates problems when thinking about retirement and succession planning. The project group consists of myself, my firm's project managers, our contact on the client side who is serving as project manager, and the participants.

THE RESEARCH PLAN

For both organizations, I designed a research plan that included interviewing people who could discuss the work of the subjects of the research, shadowing the primary subjects, and interviewing the primary subjects, in that order. My thought was that it would be helpful to hear what others felt about these individuals and what made them different. Then I would observe the individuals while they were working. According to the initial research plans, the ethnographic research was to be conducted first, then the data would be analyzed and presented in a report format that would outline potential themes for the training. Video recording was to be used secondarily to capture footage to be used in developing training curricula. Each organization was supposed to provide us with three individuals who would be the focus of the initial pilot program, with the goal of repeating the process with other individuals in future years.

The initial research plan was not implemented quite the way I envisioned it in each of these cases. This is where working in a group, particularly one that included a mediator between the people who were the focus of the research and myself became problematic. There were several changes made to the original research plan as we moved from the development of the plan through the ethnographic research process. These changes included the timeframe of the research, the number and type of participants, the support interviews that were conducted, and the timing of the video recording. In hindsight, one of the biggest difficulties seemed to be a lack of understanding by many people involved in the project as to what exactly ethnography entails. This lack of understanding seemed to negatively impact the timeframe, attempts to schedule time with the research participants, the relationship with research participants, and the outcome of the project.

Ethnography in the School

For the school project, my initial plan included interviews with other teachers who could talk about the primary subjects as well as parents of students in the focus teachers' classes. In discussing the plan with the rest of the team, we initially added interviewing alumni and students. I pointed out ethical concerns of interviewing current students, so we agreed to limit the student participation to former students who were in their senior year. However, at least partly as a result of time constraints, we ended up only interviewing the focus teachers and some of their peers who could talk about their work.

The timing of the project also became an issue. The project was first discussed at the beginning of the school year with the understanding that the research phase would take place over several months. However, because of the busy schedules of all whose input was necessary to begin the project, both internally and on the client side, the start date moved further and further back until it was finally scheduled at the very end of the school year. Then, we were limited in the amount of time we could spend shadowing, interviewing, and videoing. We would have seen some different behaviors had we conducted the research earlier in the school year, and we would have had more time to conduct the research.

In addition, by the time the research started, the school had decided to change from focusing on three high performing teachers to two teachers, one principle who also taught one class, and the school's headmaster. Because of the nature of the work of the administrators, the shadowing portion became more difficult with them than was originally envisioned.

As I worked with our school contact to set up a schedule for conducting research, it became evident that the primary concern and focus on his end was on scheduling the videotaping. In addition, our initial plans of interviewing a wide variety of people who could talk about the focus teachers was cut down to only interviewing a few peer teachers. The plan to conduct all shadowing and interviewing first and then later come back for video recording became condensed to the point that it was all intermixed and the interviews with peer teachers were only video recorded. I had to repeatedly ask for more time for shadowing and interviewing without being video recorded so as to actually conduct ethnographic research and build rapport with the focus teachers before videoing, which I was eventually granted. However, the shadowing time was more condensed than was outlined in the research plan.

Then, when I met the teachers and administrators with whom I was to shadow and interview, it was evident that they knew very little about the project. In fact, when I showed up for the first observation day, the teachers were not expecting me. They had been told about the video recording day that was a few days later, but they were not aware that I would be sitting in on their classes. Even after explaining my role as an ethnographer, I still received puzzled and bewildered looks as if they were wondering what my real goal was. The teachers expressed disbelief that there was anything I could learn from watching them do their job, aside from learning the content they were teaching. Several joked that I would be given a quiz over the material covered that day. In hindsight, I should have spent more time explaining ethnography to all involved at the beginning of the project. It would have been

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helpful to have an initial meeting with the teachers before observing them in the classroom to explain the ethnographic process.

Ethnography in the Aviation Industry – The experience with the aviation organization was similar in that the initial research plan was not followed exactly as outlined and agreed upon in the planning stage. Changes included the number of participants, the use of phone versus in-person interviews, and the length of time needed to conduct the research.

The research plan for the aviation company included interviews with people who work around the high performers, including those who they report to, co-workers, and people whose work they oversee. The plan specifically stated that these interviews were to be conducted in-person. During the project development phase, it was suggested by others that we simply conduct an online 360-degree feedback that is part of a standard review process used at many companies. I explained that I did not feel that would be as helpful as conducting individual interviews, and the team agreed.

The first problem with the aviation project was that the company decided they wanted us to conduct a pilot study with one senior manager as opposed to the three initially agreed upon. I was concerned that focusing on a single individual rather than a few individuals would make this project more difficult in terms of gleaning information that can be used in a training program that is general enough to apply to many people in the organization.

Moreover, the manager the client selected as the "test case" works primarily out of his pick up truck and his home and has a very sporadic schedule depending on the needs of the company that vary from day-to-day. I deemed this manager to be a very poor choice to test out the program since he did not have an office, and we were both reluctant to have the shadowing occur at his home. Moreover, he was reluctant to participate in general. He is very reserved and did not feel he had much to offer to the project. He was also not happy about having a "shadow." After my first meeting with him, via videoconferencing, I wrote in my notes, "He is a horrible choice as our test case!" based on his reluctance and the lack of an office space where the shadowing could occur. I encouraged the client to choose a different person as our test case, but I was told that he would be the most willing participant of any of the employees on their list to include in later stages of the project. They also felt very strongly that it was important to capture as much as they could about this individual since he is so highly regarded.

The reluctance of this manager and his schedule made it difficult for us to get together for the shadowing. At one point the client suggested I tell the manager, "I just need to meet with you for a few hours and then I will never bother you again." However, I pointed out that this was impossible since I needed to spend several days shadowing him and then we would be back to videotape at a later date. There seemed to be a lack of understanding of the time that would be necessary for this to truly be an ethnographic research project.

Again, the lack of understanding of what ethnography is became an issue as the manager did not want me to shadow him and kept telling me that he felt sorry for me because my job was clearly very boring since I had to watch him. This project has progressed much slower than expected since it is difficult to arrange times to shadow this individual; however, I have had the opportunity to shadow him on several different occasions over a three month period.

Similar to the school project, the interviews with others changed a bit from the initial research plan too. I had to repeatedly ask for the names of other participants, and then because they all work in different locations, I ended up conducting phone interviews rather than meeting in-person with the other interviewees. While I had to keep reminding the client of the need to interview others in addition to the main subject of the project, I was able to conduct most of the interviews before my first meeting with the manager.

Unlike with the school project, I have been able to conduct the research for this project without any video taping to date. At this time, I have concluded the observation and interview period, and I am working on a project report that includes suggested topics for the training curriculum. I will work with the client and the rest of my internal team to make sure the topics are areas they would like to reinforce with their workforce. We will work with the client to develop the next phase of this project.

Negotiating the Deliverables

The projects are on-going and are at different stage, but it is worth reviewing how the team approach impacted not only the research process but the final deliverables. For the school, the initial research plan stated that findings would be presented in a written report and that a training program would be developed that included a video component. As the project evolved, the deliverables expanded to include a video highlighting each teacher that would be housed on a separate landing page that will be linked to the school's website. This expansion seemed organic, and I cannot recall exactly how this happened, but it was not included in our initial proposal or scope of work.

In addition, my firm has produced a 10-minute video to be shown to teachers on their first day back to school. I do recall how this came about, as I was surprised at the request since it was never discussed. One day I received an email from my liaison at the school telling me that we had 10 minutes to show a video at the back to school meeting between the teachers and administration. Until I received that email, I had been working under the understanding that I was to develop a training program to be used during the teacher workdays in August. Since the 10-minute video was not initially part of the research plan, I had to adjust priorities for this project and re-evaluate to determine what this video would entail. I decided to have this video be a teaser that introduced the main themes I expect to include in the training program. I drafted a script for the video that was edited and revised by our project manager. I then sent the script to one of our designers who created a storyboard for the video. At this stage, we sent the storyboard to the client for their feedback. While they approved the video and the themes it introduced as a whole, they had a few minor edits in terms of the specific clips I pulled from some of the teachers.

Basically, they asked us to take out clips they felt were "too strong" or were "not the right message" for the video. For instance, one of the clips we took out was from a teacher who said, "Some people think you have to love kids. I don't. You have to like them, of course, but you have to love your subject." We thought this was a great, honest quote that very clearly reflected the personality of this particular teacher. However, we had to edit it out of the video.

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In terms of the content of the video, I was pleased that the script was based on the findings of the research. However, the fact that we are creating this video while the training, which I believe is the main piece of the project, remains on hold, illustrates the competing priorities where the client is more interested in a video that can be shown to teachers and administrators (and now they want to show to parents and students too) than they are in the training program that I believe is at the heart of the knowledge transfer process.

The focus on this short video in addition to work for our other clients has resulted in a pause in development of the training program. I plan to review the themes of the training program with people at the school who are involved with teacher training to make sure our efforts are not duplicated in other training programs they use. This will be a co-creative process to make sure that the training program I develop is something that will be helpful to the school. I must also work with the school to develop a program that they will be able to utilize within the constraints and timeframe they have available in their school calendar for professional development. In addition, when we develop the videos that highlight each teacher and the landing page, I will work with the creative department at my firm as well as our counterparts and the new headmaster at the school.

For the aviation organization we are at the very early stages of beginning to work on deliverables. I have developed a training outline and have meetings scheduled to review findings thus far and discuss next steps. At this point, the expected deliverables have not yet changed. This client is very focused on the training program, so I do not expect that deliverable to change much from the initial plans.

Tacit vs. explicit knowledge

One of the selling points of using ethnography to capture knowledge of high performers is that it should allow one to be able to capture and record tacit knowledge and then translate that into something more tangible that can be used to train other employees. In thinking about the research findings to date, it is helpful to consider the extent to which this has occurred in these projects. One of the difficulties with this project is trying to capture intangibles that allow certain employees to excel at their jobs and translate that to a tangible output that can be useful for training other employees.

A related concern that has been raised by academics has to do with the potential of ethnography to lead to the codification of information that would lend itself to automation of tasks previously performed by humans. While this can certainly occur in some industries (see Brun-Cotton 2010), the case studies focused on for this paper highlight the aspects that make certain employees high performers. The "human" elements that make them different from their peers, more successful, and more valuable to their company are things that cannot be easily automated. They are more related to soft skills that are not easy to develop via traditional methods of training.

For the school, some of the themes that are covered in the initial video (and will presumably be covered in the training) could be classified as tacit knowledge and while we can state that great teachers have these characteristics (for instance, the desire to share their knowledge with others), we cannot design a plan to replicate that desire in a person who does not already have that trait. While these themes are not necessarily themes that will be new to the faculty members, I feel that having examples from their former colleagues, who were very influential and well respected at the school, will help make the training unique and focused specifically to the needs of this particular school. These video examples will also help make this tacit knowledge more explicit. It may also help teachers recognize the characteristics or qualities that they already have and need to develop further. I believe the training will be inspiring for current teachers who will want to continue the legacy of these excellent teachers. This in turn will be beneficial for the school since one of its hallmarks is its excellent teaching.

While the aviation project has not progressed as far as the school project, it has also yielded some interesting results, even at this early stage. The manager, who was a reluctant participant, has some attributes, behaviors, and tasks that he performs that are not the norm for his peers. One of the primary characteristics that makes this manager successful is that he takes the time to meet in-person with those he manages. This means going to tour their bases and talking with his employees. While there are electronic means to do these things, part of his strength lies in the fact that he takes the time to do this in person and really gets to know the people whose work he oversees.

The training program I have proposed focuses on management skills, techniques, behaviors, and processes that are currently not taught in this organization. The training program for this client will also be developed using a co-creative process, but since the organization does not currently have a management-training program that focuses on management skills specifically, we are less concerned about duplicating efforts. For this client, the main concern with developing a training program is to create something that will be engaging and effective in an environment where the managers already feel they are pressed to their limits in terms of training and job responsibilities.

CONCLUSION

At this stage, I believe that an ethnographic approach has allowed a deeper understanding of high performers in each organization and that the use of video will help to store and transfer that knowledge to others in the organizations. While I do not feel that this ethnographic approach would be suitable on its own for knowledge management or transfer, I do believe that it will help ease some of the concerns and difficulties regarding this transition period for many of our clients and can be an important tool in succession planning. I am also hopeful that the format of the deliverable as a co-created training program will prove to be a very useful format that can be used indefinitely for these clients.

It is my contention that this method can be replicated with other clients in similar and different industries. However, I do not feel that ethnography can stand alone as a KM strategy. It is probably best reserved for gathering knowledge and techniques from particularly high performing individuals. Its usefulness for recording and transferring very detailed aspects of an occupation or organization remains to be seen. However, as a tool for gathering tips and techniques from high performers, based on the two case studies to date,

we believe the ethnographic process has yielded rich results that will be very beneficial for our clients.

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