
The Knowledge Creation Organization: The Case of Alphanam

Nguyen Ngoc Thang

University of Economics and Business, Vietnam National University

Email: thangnn@vnu.edu.vn

Abstract

Knowledge and the capability to create and utilize knowledge today are considered to be the most important sources of a firm's sustainable competitive advantage. This paper aims to advance understanding of the knowledge creation of firm in Vietnam by studying Alphanam Company. The case illustrates how knowledge-based management pursues a vision for the future based on ideals that consider the relationships of people in society. The finding shows that the case succeeded because of their flexibility and mobility to keep meeting to the changing needs of the customers or stakeholders. The paper also provided some suggestions for future research to examine knowledge-based management of the companies in a different industry segments and companies originating in other countries.

Keywords: Knowledge creation, knowledge-creating companies, Alphanam

1. Introduction

Today, at the information-knowledge era, only the organizations that manage and harness effectively their knowledge resources can benefit the most from competitive advantages to ensure the sustainable development of the organization. In the knowledge economy, the success in doing business is defined as generating new knowledge and spreading the knowledge rapidly in the enterprise, as well as developing new technology and products (Grant, 1996; Spender and Grant, 1996). Successful companies are creative and knowledge generating enterprises because according to the resource-based view, a firm is a collection of resources and those with superior resources will create competitive advantages (Barney, 1992). However, the resource-based view of the firm fails to explain the dynamism in which the firm continuously builds such resources through the interactions with the environment. More specifically, knowledge is considered to be the most important source of a firm (Drucker, 1993; Nonaka & Takeuchi, 1995; Sveiby, 1997). It seems that we are still far from understanding the process in which an organization creates and utilizes knowledge.

Nonaka & Toyama (2002) argue that knowledge is created through the synthesis of the contradictions between the organization's internal resources and the environment. Thus, a case study is a suitable research strategy when it is necessary to study the phenomenon empirically in its context. The advantage of the case study method increases when the theoretical refinement of a concept, such as knowledge creation, is still in its process (Yin, 1994) and it has potential to accurately control for all

other factors that may influence to knowledge creation and lack of insufficient data.

In this study, we chose Alphanam to analyze the knowledge creation because the company is the leading group in the fields of industrial manufacture and installation, transportation construction and infrastructure development in Vietnam with many member companies. It has been thriving based on knowledge-based management activities over the past 15 years. As a case study for identifying the stages of knowledge-based management process, we applied the knowledge based management theory (Nonaka, 1991; Nonaka and Takeuchi, 1995) to assess and analyze the knowledge creation of the company.

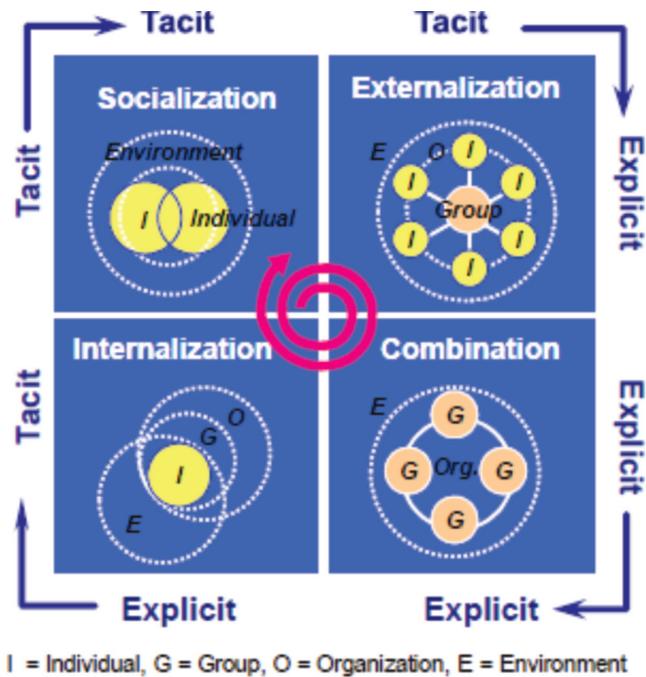
2. Theoretical framework

2.1. Knowledge creation model

The following subsections explore some basic constructs of the theory of organizational knowledge creation. Polanyi classified human knowledge into two categories – explicit knowledge and tacit knowledge (Polanyi, 1966). Explicit knowledge refers to knowledge that is transmittable in formal, systematic language such as theoretical approach, problem solving, manuals, or database... On the other hand, tacit knowledge has a personal quality, which makes it hard to formalize and communicate such as beliefs, images, perspectives, mental models, craft, or know-how. Tacit knowledge is deeply rooted in action, commitment, and involvement in a specific context.

Knowledge is created through such interactions between human agency and social structures (Nonaka et al., 2000; Nonaka and Toyama, 2002). The actions and interactions

Figure 1: The SECI model of knowledge creation



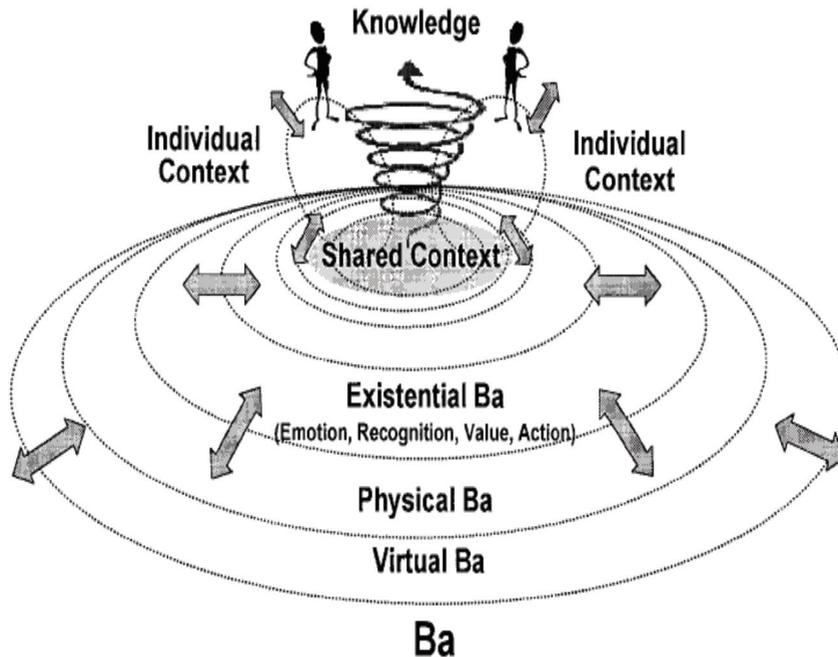
.Source: *Managing flow by Nonaka, Toyama, and Hirata, 2008*

with the environment create and enlarge knowledge through the conversion process of tacit and explicit knowledge as shown in Figure 1. Knowledge creation starts with “Socialization”, which is the process of converting new tacit knowledge through shared experiences in day-to-day social interaction. The tacit knowledge is made explicit so that it can be shared by others to become the basis of new knowledge such as concepts, images, and written documents. During the “Externalization” stage, individuals use their discursive consciousness and try to rationalize and articulate the world that surrounds them. Here, dialogue is an effective method to articulate one’s tacit knowledge and share the articulated knowledge with others.

Explicit knowledge is collected from inside or outside the organization and then combined, edited, or processed to form more complex and systematic explicit knowledge through the “Combination” process. The new explicit knowledge is then disseminated among the members of the organization. Creative use of computerized communication networks and large-scale databases can facilitate this mode of knowledge conversion. Therefore, contradictions are solved through logic rather than synthesized. Rationalism is an effective method to combine, edit, and break down explicit knowledge.

Explicit knowledge created and shared throughout an organization is then converted into tacit knowledge by individuals through

Figure 2: Conceptual representation of Ba



Source: *Managing flow* by Nonaka, Toyama, and Hirata, 2008.

the “Internalization” process. In this stage, knowledge is applied and used in practical situations and becomes the base for new routines. Thus, explicit knowledge, such as product concepts or manufacturing procedures, has to be actualized through action, practice, and reflection so that it can really become knowledge of one’s own.

2.2. Ba: knowledge-creating place

According to Nonaka (1991), the conceptualization of Ba is extended to cover the interdependent interaction between agents and structures. Thus, Ba is a continuously created generative mechanism that explains the potentialities and tendencies that either hinder or stimulate knowledge creative activities. In other words, Ba is a phenomenological time

and space where knowledge, as ‘a stream of meaning’ emerges (Bohm, 1996). New knowledge is created out of existing knowledge through the change of meanings and contexts.

Ba can emerge in individuals, working groups, project teams, informal circles, temporary meetings, virtual space such as e-mail groups, and at the front-line contact with the customer. Ba is an existential place where participants share their contexts and create new meanings through interactions. Participants of Ba bring in their own contexts, and through interactions with others and the environment, the contexts of Ba, participants, and the environment change (see Figure 2)

3. The empirical study

The empirical evidence was collected by

personal observation through on-site visits and interviews with the executives, functional managers, engineers, and workers of both headquarter and manufacturing plants of Alphanam during November and December, 2010 (more detail about the toolkit, interviewees and their position, and on-site visits, please see appendix).

3.1. Company overview

Alphanam is a private economic group in Vietnam and was established in 1995 with 10 staff. Initially, Alphanam focused on developing and producing mechanic and electric equipments. So far, after 15 years from the establishment, Alphanam has become the leading provider in investment, industrial manufacturing and installation, transportation construction and infrastructure development in Vietnam with 1,500 employees. Whereas many enterprises were seriously affected by the economic depression in the years 2008 and 2009, Alphanam has affirmed its leading position in the following key business areas: (1) being the leading mechanic and electric contractor in Vietnam; (2) being the biggest Fuji elevator provider in Vietnam; (3) being the leading national paint provider in Vietnam with the coverage over 63 provinces and cities.

3.2. Corporate philosophy

The philosophy of Alphanam is based on the belief that to be successful, an enterprise needs to respect individuals and to develop itself towards customer-driven approach. "Respect individual" means "working on the basis of respecting each other and the diversity of different individuals". The President and other members in the Board of Directors strongly believe that each person has a unique way of

thinking and creativeness, as such these differences need to be respected and individuals should be given opportunities for developing themselves and developing their creativeness. The company's management board assumes that if the company can promote the activeness and creativity of the employees at work, they can fulfill their assigned tasks and contribute significantly to their organization and the society. The Board of Directors of Alphanam also understands that through sharing the knowledge implicitly among members and collecting different ideas in one organization, the new knowledge will be continuously created, thus strengthening the organization.

"Customer-driven approach" means "entire mind and actions are for customers' interests". More specifically, Alphanam has to make greater effort to create the best products that meet customers' needs. The General Director of Alphanam Group has provided the guideline for the employees in working towards customer' needs and he stated that "Every product of Alphanam is the result of our creativeness and endeavors. We are determined to provide customers with the best services and products with the most competitive prices". In this statement, the word "we" is used instead of "company" with a view to emphasize the important roles and contribution of all individuals in the organization who are the main contributors in the process of quality products creation.

3.3. Results and discussions

Based on the corporate philosophy and vision, Alphanam's Board of Directors has developed management policies in order to guide employees in implementing daily jobs.

They also determine that middle managers have the important roles in creating the environment and implementing these policies because they can guide these policies for employees, motivate employees and be exemplary for employees. There are following the core management policies of Alphanam.

3.3.1. Research and development

With the corporate philosophy of respecting individuals' creativeness and offering the best services to customers, Alphanam's Board of Directors has set up the Research and Development Department at Alphanam Group's Head Office and in every subsidiary company. The Research and Development (R&D) Department is a functional block directly under the direction of the General Director. The main assignments of the R&D Department are to search ways to improve current products and services, to research and develop new products and services, thus increasing value for the organization's business and manufacturing activities.

In line with the corporate philosophy, the policy of the R&D is also for creativity encouragement. The R&D policy states that everyone has the rights to free creativeness in developing products. Therefore, tacit knowledge and experience of employees were maximized to create new technologies and products. The Board of Directors view is that failed experiments are not failures but lessons for future experiments and creativity.

3.3.2. Encourage open communication

According to CEO of Alphanam Group, if employees have opportunities to share ideas in working process, take the initiative in their

work and create freely, they will enjoy their work and fulfill their tasks better. Therefore, he has tried to build a friendly and open environment so that all employees will have freedom of speech, information exchange and contribute their ideas to the common development of the organization actively:

(1) The information is encouraged to be shared not only in one working group but also among divisions in the working process via "ba" such as formal and informal meetings, email, chat group, annual staff retreats, etc. Those exchanged ideas will be summed up in order to create new knowledge and to help groups and divisions solve problems more effectively because they could use the experience of everyone.

(2) To create opportunities for managers and employees of the company to learn and share experience, the company has created many "ba" to connect employees.

(3) To encourage the sharing of tacit knowledge of employees and to promote the creativeness of employees, besides organizing regular meetings between managers and employees, the Alphanam regularly organizes innovation contests such as contest of excellent and creative labor. This activity has received an enthusiastic response from the staff at Alphanam.

(4) To encourage employees to learn and share experience with each other: Alphanam Group held a cultural week for all Alphanam's employees so that the employees can have fun and creative competition. In addition, every year the company also organized the family festival for members to take an artistic, creative execution and commit to the target for

the New Year. The company also organized employees to go sightseeing in various locations. These cultural activities help members of Alphanam to be closer together and make it easier to learn, share information, knowledge and experience. It is the easy way to create “Ba” so that when there are problems, everyone solves them together.

(5) The MBA Club of Alphanam also was set up to encourage employees who have MBA degrees to exchange views. Members of this club will hold a meeting every month to discuss and share knowledge the practical application in business activities of the Company. At each meeting, one topic will be selected and the person who gave the topic will be the chair for the discussion. Through the exchanges of opinions, new ideas and initiatives to solve the problems are created.

3.3.3. Creating conditions for employees to turn their ideas into reality

To create favorable conditions for employees to exchange views, the Alphanam Boards of Directors pays a lot of attention to building teamwork. At the Alphanam office, work is divided into modules and staff are assigned into working groups. Each group consists of three staff minimum, including one leader. Members in each group need to understand the targets, assigned tasks of the group and the individual’s tasks to help the group attain the common objectives. When a problem happens, all group members have to concentrate to provide an appropriate solution. Therefore, group members frequently discuss and exchange ideas and experiences. Alphanam Directors and middle managers such as managers/deputy managers of departments also encourage

groups to share information and talk with other levels in the company to find out the best solutions to each problem. New knowledge is always created through the process of sharing information and solving potential problems.

According to Alphanam’s Board of Director, employees’ creativities are valuable when they are applied, which means that the employee’s tacit knowledge becomes explicit for widely used and shared in the company. Thus, managers in Alphanam Group always care for, listen to, respect their staff’s ideas, and create conditions for the staff to develop their ideas. When an employee has an innovation, the Company will encourage the employee to implement his/her idea by providing necessary support in terms of time and finance. All officials and employees are imbued with the Alphanam motto “There are no failures but only challenges“. They understand thoroughly the slogan: “Be creative to bring added value to the company and profits will be shared.”

When the employees of the company have some initiatives, such initiatives will be shared within the workgroup for further analysis and subsequently be reported to the group head. The group head will report to the direct manager. During the weekly meeting, the managers will discuss and report to the factory’s managing director. Employees’ initiatives are sometimes presented directly to the direct manager, without the need to wait for approval from the group head. If it is reasonable, the manager can give an approval for a trial test.

By listening to the employees, creating conditions for them to turn their ideas into reality, Alphanam managers have really encouraged creation in their employees. Thanks to that,

Alphanam's employees have had many technical innovations applied in manufacturing effectively, bringing the company benefits with a value of millions of VND. These innovations helped the company to reduce manufacturing expenses and increase labor productivity.

The example will illustrate the knowledge creation at Alphanam. The electrical staff and the technical staffs of the paint factory have successfully improved the dispersed machine by improving the unit dispersion disk into dual dispersion disks. Owing to that, they improved the product's quality and reduced the working time of the device to 1/3 compared to the previous time on a batch of products, making the productivity and product quality higher and higher. This improvement initiative was created as follows:

After the manufacturer installed and handed over the dispersed machine to Alphanam, during the time of using the machine, by observing its operation, discussing together throughout the lunch, the manufacturing staff and the mechanical and electrical staff found that the machine required too much time to stir. When it takes too much time to stir, it will transmit heat and cause the paint to be hotter. When the paint's temperature exceeds the allowed temperature, features of the paint will be reduced. (Socialization stage)

The mechanical and electrical staff discussed with their managers on this issue and offered solutions that they should refer to some similar devices on the internet of the famous firms and take notes in the papers (Externalization stage)

After studying the documents on the inter-

net and finding out the weak points of the current dispersed machine of the Company, the mechanical and electrical staff recreated stirring axis by raising the size of the current disk of creating eddy so that it can disperse stuff more equilaterally and increase effectiveness (Combination stage)

After recreating the stir axis for the machine, the machine was used in the Company in order to collect feedback from direct production workers, who regularly use the machine. Since then, the machine was further improved and modified to ensure that it achieves the technical requirements, ensure to be safety for everyone and bring efficiency to the company (Internalization stage)

By creating the environment that encourages creativity, transfers tacit knowledge into explicit knowledge, combines explicit knowledge to new explicit knowledge, Alphanam helped employees create innovations, which helped the Company to improve product quality, bring added - value to customers, increase income for employees and increase sales for the Company.

3.3.4. Human resource management

Identifying that human resource is an important factor to help the company create high-quality products with reasonable prices through their continuous innovation. Alphanam's human resources policies were created to motivate employees to be creative.

Recruitment

According to the Board of Directors of Alphanam, to be able to do the work well and to create new ideas, employees must first grasp basic major knowledge. Therefore, all

Alphanam's employees are required to have key basic knowledge of their field. With this policy, up to now, 70% of the employees of Alphanam are university graduates or post graduates.

In addition, to build a pool of good and experienced employees, Alphanam focused on attracting talent from outside the company. In 2008, when Vietnam was affected by the world economic crisis, Alphanam had an "upstream" decision compared with all other companies and competitors. Determining that the focus on tightening investment fields cannot bring the opportunity development, therefore, while opponents "hibernated": cutting down staff, reducing salaries and reducing rewards, Alphanam leaders decided to strengthen their human resources by attracting the best personnel from other companies. With the recruitment policy of "respecting talent" and expanding merger and acquisition activities, Alphanam has attracted many excellent employees from these enterprises. Thanks to this timely policy, Alphanam has built up a highly skilled workforce who has good thinking, good background of knowledge and experience. This workforce has helped Alphanam to have initiatives to improve products and constantly bring the maximum value.

Employee retaining and development

After attracting and recruiting talented people successfully, the leaders of the Alphanam paid great attention to develop policies of retaining and developing the workforce. Alphanam is willing to pay high salaries for the sales team who is believed to be in the front-line and in contact with customers. The company is also willing to pay competitive

salaries to key positions to retain the outstanding members.

At Alphanam, employees are provided with many opportunities to develop their careers. Alphanam managers tried to help employees to have space for creativity, which help them to create more and more new products and feel more attached to Alphanam. An Alphanam's officer said: "Alphanam has created good opportunities for staff to develop their careers. Not many organizations could do that. I became the Deputy Director of Business and Market Development of Alphanam after only a few months working in the position of Alphanam's Director of paint trademark. Generally, if you are employees, you could not be rich, but working in Alphanam, you can get rich with the development of the company".

In parallel with maintaining the Alphanam workforce, Alphanam often helps staff to develop the ability and experience in many diverse forms. Managers and employees of Alphanam, especially those in senior management positions are regularly rotated in their work to be able to experience and learn quickly. Sometimes, employees may be put in positions that require them to do the job that requires knowledge and experience beyond their ability, so that they can overcome challenges, accumulate knowledge, experience faster and improve themselves.

Training for employees

Determining that training is indispensable to develop a qualified workforce for the company that will serve the customer effectively, Alphanam has regularly conducted training in various forms for their officers and staff. Every month, departments have training plans and

conducted training in several forms as follows:

Orientation training programs: The purpose of this training is to help new employees understand the business philosophy, vision, mission, culture of Alphanam as well as the rules and policies of Alphanam. This helps them integrate and develop quicker.

On the job training: new employees will be guided and trained via work processes as well as sharing experience by experienced officials and employees. Thereby, employees will gain knowledge and experience in the process of their work. For example, when upgrading a manufacturing factory, Alphanam hired foreign experts from Singapore to work directly at the company. By working with these foreign experts, engineers of the Company acquired new knowledge and new technologies. Combined with their basic knowledge and capacity, these engineers will have more creativity in the process of working.

Internal training courses on knowledge, selling skills and product knowledge: At first, Alphanam will send staff to participate in some training courses. After that, the staff who participated in these training are supposed to re-train officers and employees of the Company. This is a great form of training, which helps Alphanam reduce training costs, use their staff to share the experience that best suits the characteristics of Alphanam, and enhance the knowledge for their officials and their staff.

External training courses: Alphanam has associated with the National Economics University to provide MBA and mini MBA courses for their middle management staff in order to enhance employee knowledge. In

addition, to help employees expand their vision and learn the experiences of advanced countries, Alphanam has invested time and money for staff visiting or working in foreign countries. Generally, each abroad trip's time is about 10 days. These trips help employees to have the chance to visit a modern production line in large factories in foreign countries such as Italy and Singapore. They can learn and acquire modern technology and innovative methods from foreign companies and gain experience for themselves.

Benefit and compensation

In order to create new products with higher quality, bringing more value-added for customers with reasonable costs, initiatives to improve technology are indispensable. Alphanam has the policy to award good teams and individuals who have excellent performances, initiatives to improve technology, which help the Company to improve productivity and through that can increase turnover. The awarding policies of Alphanam are diverse to promote employees' creativity such as awards in kind, rewards with certificates of merit, excellent employees will be announced on the internal net or through the meetings, etc.

For Alphanam Mechanic and electric Joint Stock Company, from 2005 to June 2010, 81 individuals and teams of the Company were rewarded for their creativity and innovation, which contributed excellently to the Company's success.

To make the reward policy effective in encouraging employees' creative ability, Alphanam has implemented the styles of reward flexibly. For the employees who have just graduated from University, they are enthu-

siastic and always want to study, therefore, when they have initiatives, the Company will reward them in kind, by cash or praise as typical examples in meetings. For the employees who have worked for a long time, they care more about position and power. Therefore, when they have initiative, the Company will use awards that are more suitable for them such as the chance for promotion.

The Director of Alphanam also understands that if all employees cooperate to solve problems, increase productivity, and improve R&D, the Company will be stronger rapidly. Therefore, they really concentrate on conceiving and implementing employee relation activities such as: promotion, and they take care when someone is sick and give gifts for female employee in special occasions: birthday, international and Vietnamese womens day.

4. Conclusions and recommendations

This paper has examined knowledge-based management at Alphanam. By implementing knowledge creation, Alphanam Group has set up its stable position in the market with sound cooperate philosophy and management policies. They succeeded because of their flexibility and mobility to keep meeting the changing needs of the customers or stakeholders. This study has the following managerial and research implications:

First, the company needs to attract, maintain and develop quality human resources, ensure that the employees have enough knowledge and competence to perform their jobs as well as develop their creativity so that employees can create new products, which have the highest quality and reasonable costs for the Company.

Second, the company creates the environment where they can encourage employees' creativity, motivate employees to be active, self-confident in performance. The company also creates conditions for employees to make their ideas become true and organize regular places ("ba") for employees to meet such as: meetings, seminars, culture weeks, retreats etc so that they have chances to share experiences as well as to encourage employees in different departments and units to exchange and share information so that they can improve their creative ability.

Third, the company should have the clear policies, which help employees to recognize that their interests are close-knit with the Company so that employees do the job with all their best and all their heart in order to create new products with more value-added. Creating motivation for staff via building up reward funds for employees' creative, innovation in various styles is also suggested.

Fourth, company need organize frequently the suitable knowledge-training programmers in order to enhance professional knowledge, management knowledge and other skills for employees. At the same time, organize training program for employees so that they can understand more clearly the vision, mission and policies of the Company.

Finally, to disseminate the knowledge-based management theory in Vietnam, future research needs to examine knowledge-based management of the companies in a different industry segments and companies originating in other countries.

APPENDIX

I. Toolkits for carrying out the case study

Question 1: How did you start operations of the business? (year, why, initial products, current products..)

Question 2: What kind of your establishment?

- Manufacturing Non-Manufacturing
 State-owned enterprise Private enterprise

Question 3: What is the company's vision? How is the vision developed? How is it change over time?

Question 4: What are the company's core business and products? How have they been changed overtime?

Question 5: What are the company's major markets?

Question 6: What are the company's philosophy, values and culture that drives it operation? How are they transcended to people in and outside the company?

Question 7: What are the company's management principles? (*e.g. how are personnel managed?*)

Question 8: How was the management principles formulated and implemented (regarding every aspect of product development, market, technology, human resource development, corporate culture...?)

Question 9: To what extent do these principles contribute/affect the development of the organization? How and why?

Question 10: How is knowledge respected and used in improving the organization?

Question 11: What is the company's success story? Why?

Question 12: What is the company's failure story? Why?

Question 13: What are future prospects for your company?

Question 14: What recommendations should be made to promote knowledge based management model in Vietnam?

II. Employees and their positions

No	List of Interviewees and their positions	Locations
1	Nguyen Tuan Hai, Board of Managers of Alphanam group	2 Dai Co Viet, Hanoi
2	Bui Hoang Tuan, member of Board of Managers, General Director of Alphanam group	2 Dai Co Viet, Hanoi
3	Hoang Minh Tuan, Deputy Manager of Paints Plant, Alphanam group	2 Dai Co Viet, Hanoi
4	Tran Tien Bay, Deputy General Director of Sales and Marketing, Alphanam group	33 Ba Trieu, Hanoi
5	Nguyen Thanh Tung, Procurement Manager/ALP Energy Division, Alphanam group	33 Ba Trieu, Hanoi
6	Do Dinh Tuan, Director of Alphanam Paints Plant	Hung Yen Industrial zone, Hung Yen
7	Nguyen Hoang Ha, Head of Planning Department, Alphanam Paint Plant	Hung Yen Industrial zone, Hung Yen
8	Nguyen Van Thuat, Electrical engineering, Alphanam Paint Plant	Hung Yen Industrial zone, Hung Yen

References

- Barney, J.B (1991), 'Firm resources and sustained competitive advantage', *Journal of Management*, 17(1), 99–120.
- Bohm, D (1996), *On Dialogue*, Routledge, London.
- Drucker, P (1993), *Post-Capitalist Society*, Butterworth Heinemann, London.
- Grant, R.M (1996), 'Toward a knowledge-based theory of the firm', *Strategic Management Journal*, 17 (Winter Special), 109–122.
- Nonaka, I (1991), 'The knowledge-creating company', *Harvard Business Review*, 96–104.
- Nonaka, I and Takeuchi, H (1995), *The Knowledge-Creating Company*, Oxford University Press, New York.
- Nonaka, I and Toyama, R (2002), 'A firm as a dialectic being: toward the dynamic theory of the firm', *Industrial and Corporate Change*, 11, 995–1109.
- Nonaka, I and Toyama, R. and Konno, N (2000), 'SECI, Ba and leadership, a unified model of dynamic knowledge creation', *Long Range Planning*, 33, 1–31.
- Nonaka, I and Toyama, R. and Hirata, T (2008), *Managing flow*, Palgrave Macmillan, New York.
- Polanyi, M (1966), *The Tacit Dimension*, Doubleday, New York.
- Spender, J. C and Grant, R.M (1996), 'Knowledge and the firm: overview', *Strategic Management Journal*, 17 (Winter Special Issue), 5–9.
- Sveiby, K 1997, *The New Organizational Wealth*, Berret-Koehler, San Francisco.