

Full Length Research Paper

# Maximizing knowledge preservation and transformation in organization

Hung-Wen Lee

Department of Business Administration, National Chia-Yi University, Taiwan. E-mail: [wayne@mail.ncyu.edu.tw](mailto:wayne@mail.ncyu.edu.tw).  
Tel: +886+52732832. Fax: +886+52732826.

Accepted 04 September, 2019

The business environment is in great need of human resources for organizational transformation in recent years. Therefore, how to ensure new workers to acquire the knowledge and skills of organizational operations within a short time in order to achieve skill transfer by means of education and training are businesses faces. Therefore, this study will investigate the reasons to enhance knowledge preservation and transformation in order to facilitate the establishment of the knowledge management system and thereby enhance the global competitiveness of business. The research results show that organizational identification, altruism, dutifulness, interpersonal harmony, and organizational resources can enhance knowledge preservation and transformation.

**Key words:** Organizational identification, altruism, dutifulness, interpersonal harmony, organizational resources.

## INTRODUCTION

The service industry is in great need of workers. As apprenticeship is the organizational operating policy for new workers to acquire customer service skills from senior workers and the employee turnover rate is high, knowledge preservation and transfer has become exceptionally important in the service industry, and knowledge management should be promoted within the organization. However, Bock and Kim (2002) believed that knowledge sharing is a required process in knowledge-management-related activities. Though knowledge sharing is an important process based on a survey. Ruggle (1998) maintained that changing knowledge sharing behaviors is the main obstacle in promoting knowledge management. In fact, it is the biggest problem in organizational knowledge management promotion. Chatman (1991) pointed out that the agreement of value provides organizational members a common faith, concept, code, and thinking pattern to accelerate the progress of consensus, promote cooperative behavior, and enhance the job satisfaction and work performance of members. Therefore, this study will investigate the relationship between OCB and KSE to enhance the KSE of organizational members in order to facilitate the establishment of the knowledge management system and thereby enhance the global competitiveness of the service

industry. The aim of this study is to investigate how to maximize the knowledge preservation and transformation in organization.

## LITERATURE REVIEW

### OCB

#### *Definitions*

a) According to Katz (1964), effective organizational operation is achieved with three behaviors: i. employee involvement and retention; ii. conformance to the requirements specified for the roles within the organization; and iii. self-motivated innovations and voluntary amelioration of work requirements. The first refers to the absences and termination of employment of employees. The second is the work behavior of employees in their organizational roles; i.e. how employees behave to achieve the performance requested by the organization. The third denotes the behaviors outside of the organizational role; i.e. how employees behave to voluntarily surpass the work requirements and contribute to the achievement of organizational goals.

Katz and Kahn (1966; 1978) believed that the third organizational behavior includes helping colleagues solve problems, voluntary help for new employees, self-learning to improve work capacity, protection of organizational resources, and voluntary spread of organizational advantages. Organizational behaviors of this kind are known as the organizational citizenship behavior; i.e. employee behaviors with positive and substantial help for the organization.

b) Organ (1990) pointed out that OCB refers to the meaningful behaviors and performances in the organization that are unrelated to the duties of any job and unrestricted by any contract terms. They are a kind of unofficial devotion, and the actors of such behaviors usually consider neither punishment nor positive incentive when determining to act or to hold such behaviors. That is to say, OCB is the controlled behaviors that are not specified in the duties of employees or restricted by means of a contract, and directly recognized in the official reward from the organization; though they are required in the organization and can help to enhance organizational efficiency in general.

c) Konovsky and Pugh (1994) added that OCB is a kind of employee behavior surpassing the duty requirements and is subject to voluntary judgment and outside of the official pay structure of the organization.

d) Robinson and Morrison (1995) pointed out from the viewpoint of the psychological contract that OCB refers to all behaviors beyond the contracts or agreements signed between employees and employers.

### **Constructs**

Farh et al. (1997) classified OCB into five constructs: organizational identification, altruism, dutifulness, interpersonal harmony, and protection of organizational resources. The questionnaire of this study was developed according to the constructs as described thus:

a) Organizational identification: It refers to the employee's effort to maintain the organizational image, active participation in organizational meetings and activities, and voluntary proposition of constructive solutions for organizational improvement.

b) Altruism: It refers to the voluntary provision of assistance and solutions for particular organizational personnel (colleagues or supervisors) or non-organizational personnel (customers or suppliers) in areas related to the organization.

c) Dutifulness: It refers to the heroic behaviors of organizational members surpassing the minimum organizational requirements.

d) Interpersonal harmony: It refers to the effort made by employees to prevent political behaviors destructing organizational harmony for seeking personal benefits.

e) Protection of organizational resources: It refers to the

effort of made by employee to avoid handling personal affairs during work hours or with organizational resources.

### **Summary**

The service industry is in great need of human resources for organizational transformation as a result of IT advancement in recent years. Interpersonal harmony within the organization, organizational harmony and related frequent activities within the organization should be verified with a quantitative approach in order to investigate their correlations and effects. Therefore, this study developed the questionnaire based on the five constructs of OCB proposed by Farh et al. (1997), that is, organizational identification, altruism, dutifulness, interpersonal harmony, and protection of organizational resources.

### **KSE**

#### **Definitions**

Davenport and Prusak (1998) thought that knowledge is a flowing property. It originated from information and needed personal participation of people in the process of conversion from information to knowledge. Knowledge is the combination of information, capacity and attitude. It is also the result of interaction among experience, skills, cultures, characters, personalities and perception.

Nonaka and Takeuchi (1995) classified knowledge into implicit knowledge and explicit knowledge in their knowledge spiral theory, and found that the interaction scale of implicit and explicit knowledge expanded with increase of the knowledge quantity. Implicit knowledge contains experience, value and behavior patterns. It is shared between an entity (an individual, group or organization) with another one through learning and assimilation to generate new knowledge. Explicitation of implicit knowledge is an important part of organizational innovative activities, and an organization with strong innovation capability usually has remarkable explicitation functions. Implicit knowledge is more personal and subjective. It is generalized from empirical experience and is synchronously practical knowledge. Hence it is difficult to formulate it with languages or words and, thus, impart it to other people so that they can understand in a short time. Unlike implicit knowledge, explicit knowledge is objective and deduced from rational mental activities such as equations and theories. It is continuous theoretical knowledge.

Boehle (2001) emphasized that knowledge sharing was the focus of knowledge management in the future. Organizations should think highly of nonofficial communication, encourage people to make face-to-face contact, and establish a trustworthy environment.

Wijnhoven (1998) defined knowledge sharing as a knowledge transfer through information media. It was a process in which a knowledge receiver explained new knowledge based on the knowledge that he/she has known or two people interacted with each other.

As Nancy (2000) pointed out, the purpose of knowledge sharing was to enable people to know, impart knowledge to other people, share knowledge with the other party, possess knowledge commonly and eventually enable the entire organization to know. For knowledge owners, sharing is a selective action. But for knowledge receivers it is an absorption process. Knowledge sharing is optimized when both are in a balanced state. Connelly and Kelloway (2003) found that knowledge sharing was the power for an organization to establish innovation. Hence, knowledge sharing allowed the organization to create synergy of knowledge value via exchange of the knowledge. Davenport and Prusak (1998) thought that knowledge owners had the willingness of knowledge sharing because they expected benefits and advantages for themselves via this transaction. Furthermore, knowledge sharing encourages a transparent and reciprocal knowledge transfer among partners. It allows enterprises to share experience and resources or learn knowledge through benign interactive relationship to bring the inter-organizational leverage into full play. More innovations are realized via an appropriate knowledge transfer mechanism (Dyer and Nobeoka, 2000) to maximize both macro and micro benefits.

### **Constructs**

How a member of an organization can voluntarily share his/her knowledge with colleagues or the organization depends on his/her role in the work group and is usually determined by the exchange relation between his/her supervisor and him/her. (Graen, 1976) Usually, employees have more willingness to work hard when they maintain a good relationship with their supervisor. In general, mutual trust, mutual respect, mutual loyalty and mutual obligation are higher between members who have better relationships in an organization. If employees can share their knowledge and experience with others as a result, the organizational capital and customer capital of the company will be increased and a core value will be created within the company (Petrash, 1996). Knowledge sharing allows members of an organization to learn more knowledge and, more importantly, it provides the organization with an efficient tool to maintain competitive advantages. With increasingly upgraded technology and information, the work of physical laborers has been gradually replaced by new techniques and machines, and knowledge will be an occupational prerequisite in the new knowledge-economy era. Learning important knowledge and skills within the organization through establishment of relationship among members is helpful not only in enforcing collaboration, but also in speeding up the accumulation of

knowledge assets for the organization to improve its innovation performance.

Eagerness refers to the human expression of free will based on choices, decisions, purposes, and social behavioral norms. Williams (1972) believed that eagerness refers to the individual desire or tendency to achieve a future goal and pointed out that eagerness refers to the state of psychological and behavioral consistency; i.e. when people are eager to do something, they will express this eagerness in their behaviors. In this case, KSE means the behavioral expression of the psychological state of knowledge owners. When organizational members are eager to share knowledge with others, they will share it without reservation and even voluntarily tell others. This is the state of psychological and behavioral consistency. Hendriks (1999) emphasized that how to make organizational members share knowledge with others is the key to knowledge management promotion. In other words, to enhance the KSE of members will be one of the foci for organizations to effectively enforce knowledge sharing. Grant (1996) reckoned that knowledge is private, and knowledge owners must be eager and able to make it public in order to effectively operate knowledge sharing. Syed-Ikhsan and Rowland (2004) proposed that KSE refers to the knowledge owner's eagerness to share private work knowledge with others or groups for the benefits of work. Therefore, to motivate the KSE of knowledge owners is the prerequisite to enhance knowledge sharing effectiveness. Concerning KSE measuring, Senge (1997) divided knowledge sharing behaviors into the individual knowledge sharing and learning opportunity sharing. Firstly, individual knowledge sharing is achieved by language, text and physical actions, and sharing by language is further divided into active, interactive and passive sharing. Secondly, learning opportunity sharing falls into self-controlled sharing and third-party sharing.

### **Summary**

The service industry is in great need of human resources for organizational transformation as a result of IT advancement in recent years. Therefore, how to ensure new workers to acquire the knowledge and skills of organizational operations within a short time in order to achieve skill transfer by means of education and training is what the service industry faces. In practice, the service industry may develop an industry-specific knowledge management system by integrating IT and knowledge sharing to provide organizational members ubiquitous learning opportunities in order to achieve knowledge and skill transfer within a short time. Given that KSE is the key to success in knowledge sharing, the purpose of this study is to investigate the KSE of workers by survey with the questionnaire developed according to the KSE single construct proposed by Fishbein and Ajzen (1975). The definition of this single-construct knowledge sharing

behavior is described below. KSE refers to the probability of the subjective desire of an individual to do something; that is, the measuring of the strength of desire of an individual to do something (Fishbein and Ajzen, 1975).

## RESEARCH METHODS

### Research hypotheses

H<sub>1</sub>: The OCB of service industry workers has a significant effect on KSE.

H<sub>1-1</sub> : The organizational identification of service industry workers has a significant effect on KSE.

H<sub>1-2</sub>: The altruism of service industry workers has a significant effect on KSE.

H<sub>1-3</sub>: The dutifulness of service industry workers has a significant effect on KSE.

H<sub>1-4</sub>: The interpersonal harmony of service industry workers has a significant effect on KSE.

H<sub>1-5</sub>: The protection of organizational resources of service industry workers has a significant effect on KSE.

### Samples

Data of this study were collected by survey on service workers in order to further verify the opinions and views of this study. The questionnaire was distributed to samples by mail.

### Instruments

1. OCB: The OCB scale of this study was developed according to Farh et al. (1997) in order to accurately evaluate the OCB of service industry workers.

2. KSE: The definition of knowledge sharing behavior proposed by Ajzen (2002) according to Fishbein and Ajzen (1975) was applied to this study. The KSE scale containing 35-point Likert items was developed according to the three items proposed by Ajzen (2002).

### Pretest

Samples of the pretest were service industry workers in Taiwan selected at random. Of 300 questionnaires distributed, 133 samples were recovered. After deducting 12 samples with incomplete answers, there are 121 valid samples, with the valid sample rate at 40.33%.

## RESEARCH RESULTS

### Samples

Samples of this study were selected at random from the service industry employees in Taiwan. Of 1200 questionnaires distributed, after deducting 57 invalid samples, there are 289 valid samples, with a valid return rate of 24.08%.

### Correlation analysis

The Pearson correlation analysis was applied to verify

the correlations between OCB and KSE in integrated service industry employees.

Results of Pearson correlation analysis show that all variants are significantly correlated, and the significance is  $p < 0.01$ . The correlation coefficient between organizational identification and KSE is 0.569, altruism and KSE is 0.473, dutifulness and KSE is 0.549, interpersonal harmony and KSE is 0.551, and protection of organization resources and KSE is 0.374. Based on these results, we can conclude the following:

a) The organizational identification and KSE of service industry workers are significantly correlated, i.e. H<sub>1-1</sub> is supported: The organizational identification of service industry workers has a significant effect on KSE.

b) The altruism and KSE of service industry workers are significantly correlated, that is, H<sub>1-2</sub> is supported: The altruism of service industry workers has a significant effect on KSE.

c) The dutifulness and KSE of service industry workers are significantly correlated, that is, H<sub>1-3</sub> is supported: The dutifulness of service industry workers has a significant effect on KSE.

d) The interpersonal harmony and KSE of service industry workers are significantly correlated, i.e. H<sub>1-4</sub> is supported: The interpersonal harmony of service industry workers has a significant effect on KSE.

e) The protection of organizational resources and KSE of service industry workers are significantly correlated, i.e. H<sub>1-5</sub> is supported: The protection of organizational resources of service industry workers has a significant effect on KSE.

### SEM analysis

The measurement indicators of the overall model goodness-of-fit in the study and the P value reach the significance level. Hence, in addition to the chi-square value, other measurement indicators of model goodness-of-fit need to be used to determine the goodness -of-fit of the model. Other measurement indicators of overall model goodness-of-fit show the value of GFI=0.91, RMR=0.050, SRMR=0.047, NFI=0.94, NNFI=1.37, CFI=1.00. Most of them are higher than the acceptable fit criteria and the overall goodness-of-fit of the model is good. Based on the SEM empirical results, the path coefficient between OCB and KSE of service industry workers is significant. This suggests that OCB has significant and positive effect on the KSE of service industry workers. Therefore, when service industry workers perceive stronger organizational identification, altruism, dutifulness, interpersonal harmony and protection of organizational resources, they have stronger KSE; and H<sub>1</sub> is supported. This may be the reason that though knowledge workers consider that sharing knowledge will mean a loss of competitive advantage, it also suggests

an opportunity to make profit. Therefore, profit will encourage OCB. Likewise, OCB can encourage KSE.

## CONCLUSIONS AND

### SUGGESTIONS Conclusions

Results of SEM analysis show that OCB has a significant and positive effect on the KSE of service industry workers, and  $H_1$  is supported. This suggests when service industry workers perceive stronger organizational identification, altruism, dutifulness, interpersonal harmony and protection of organizational resources, they have stronger KSE. When comparing this result with that of Davenport and Prusak (1998), the OCB of service industry workers has an effect on their KSE. The possible reason is that the buyer and seller in a knowledge trade believe that each party can benefit from the trade according to the knowledge market concept. The importance of the rewards from such kind of knowledge market includes reciprocal altruism and altruism which promotes knowledge exchange and sharing. Therefore, encouraging OCB is an important step to promote KSE in employees.

a) The relationship between organizational identification and KSE is significant; while organizational identification refers to the employee's active participation in organizational activities, organizations can organize more organizational activities and listen to the suggestions of employees. When employees feel the organizational cohesion, they will be more eager to share their knowledge.

b) The relationship between altruism and KSE is significant; while altruism refers the voluntary provision of assistance and solutions of organizational employees in areas related to the organization, organizations can encourage interactions between organizational and non-organizational members in order to improve employee KSE.

c) The relationship between dutifulness and KSE is significant; while dutifulness refers to the act of organizational members surpassing the minimum organizational requirements, organizations can approve and encourage employees with such acts in order to encourage employee KSE.

d) The relationship between interpersonal harmony and KSE is significant; while interpersonal harmony refers to the effort made by employees to prevent political behaviors destroying organizational harmony to seek personal benefits, organizations can create a harmonious work environment in order to enhance employee KSE.

e) The relationship between the protection of organizational resources and KSE is significant. While protection of organizational resources refers to the effort made by employee to avoid handling personal affairs during work hours or with organizational resources, organizations can

inoculate the law-abiding concept to employees in order to boost employee KSE.

## Suggestions

Empirical results show that organizational identification, altruism, dutifulness, interpersonal harmony, and protection of organizational resources can enhance KSE, organizations can effectively change the OCB identification and support of employees with collaborative behaviors, which has substantial management significance in KSE improvement.

a) Reinforcement of organizational identification; Organizational identification correlates with the employee's voluntary participation in organizational activities and development of corporation image. For example, the voluntary acts of publicizing the organization and suggesting constructive solutions to the organization are interrelated to the organization's interaction with employees that employees perceive. In this case, it is necessary for organizations to interact more with employees in order to provide them with more opportunities under the organization.

b) Reinforcement of altruism; Altruism correlates with the employee's voluntary provision of assistance in areas related to the organization. For example, the voluntarily assistance for other organizational members or non-organizational members is interrelated to the mutual understanding among members. In this case, organizations should encourage members to understand one another better and interact more with non-organizational members in order to allow members to develop a good relationship with both organizational and non-organizational members and to provide voluntary assistance where necessary.

c) Reinforcement of dutifulness; Dutifulness correlates with the work devotion of employees. For example, the effort to enriching oneself of employees is interrelated to their self-requirements at work. In this case, organizations can create a well-laid learning environment in order to give employees more opportunities to learn and thereby improve their work capability.

d) Reinforcement of interpersonal harmony; Interpersonal harmony refers to the employee's effort to maintain organizational harmony. For example, the employee's effort to prevent political behaviors destroying organizational harmony to seek personal benefits is interrelated to the employee's social activities within the organization. In this case, organizations can inoculate to employees the concept of peace is gold in order to let employees feel the peace and harmony in the organization.

e) Reinforcement of protection of organizational resources; Protection of organizational resources correlates with the employee's effort to avoid handling personal affairs during work hours or with organizational

resources. For example, handling personal affairs during work hours or making private calls with the organizational telephone lines are interrelated with the misuse of the tangible assets and intangible regulations of the organization. In this case, organizations can educate employees to value resources and to act by the book in order to let employees learn self-management.

## REFERENCES

- Ajzen I (2002). Perceived behavioural control, self-efficacy, locus of control and the theory of planned behavior. *J. Appl. Soc. Psychol.* 32: 665-683.
- Bock GW, Kim YG (2002). Breaking the myths of rewards: an exploratory study of attitudes about knowledge sharing. *Informational Resour. Manage. J.*, 15(2):14-21.
- Boehle S (2001). Knowledge management expert Larry Prusak to keynote at Training 2002, Training, Set, 38(9): 24-25.
- Chatman J (1991), Matching people and organizations: Selection and socialization in public accounting firms, *Adm. Sci. Q.*, 36(4):459-484.
- Connelly CE, Kelloway E (2003). Predictors of employee's perceptions of knowledge sharing cultures, *Leadership Org. Develop. J.*, 24(5): 294-301.
- Davenport TH, Prusak L (1998). *Working knowledge: How organization manage what they know.* Massachusetts: Harvard Business School Press.
- Dyer JH, Nobeoka H (2000). Creating and managing a high-performance knowledge-sharing network: The TOYOTA Case, *Strategic Manage. J.*, 21: 345-367.
- Fishbein M, Ajzen I (1975). *Belief, attitude, Intention and Behaviour: An introduction to theory and research,* reading, MA: Addison-Wesley.
- Farh, JL, Earley PC, Lin S (1997). Impetus for Action: A Cultural Analysis of Justice and Organizational Citizenship Behavior in Chinese Society, *Adm. Sci. Q.*, 42: 421-444.
- Graen GB (1976). Role making processes within complex organizations. In M.D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology*, p.1201
- Grant RM (1996), Toward a Knowledge-Based Theory of the Firm, *Strat. Manage. J.*, 19: 109-122.
- Hendriks P (1999), Why share knowledge? The Influence of ICT on Motivation for knowledge sharing, *Knowl. Process Manage.*, 6(2): 91-100.
- Katz D (1964), Motivational Basis of Organizational Behavior. *Behav. Sci.*, 9: 131-146.
- Katz D, Kahn RL (1966). *The Social Psychology of Organizations.* New York, Wiley.
- Katz D, Kahn RL (1978). *The Social Psychology of Organizations*, 2nd , New York, Wiley.
- Konovsky MA, Pugh SD (1994). Citizenship behavior and social exchange. *Acad. Manage. J.*, 37(3): 155-169.
- Nancy MD (2000). *Common Knowledge: How companies thrive by sharing what they know,* Harvard Business School Press, Boston.
- Nonaka I, Takeuchi H (1995). *The knowledge creating company,* N.Y. Oxford University Press.
- Organ DW (1990). The Motivational Basis of Organizational Citizenship Behavior, *Res. Organ. Behav.*, 12: 43-72.
- Petrash G (1996). Dow's journal to a knowledge value management culture, *Eur. Manage. J.*, 14(4): 365-373.
- Robinson SL, Morrison EW (1995). Psychological Contracts and Organizational Citizenship Behavior: The Effects of Unfulfilled Obligations, *J. Organ. Behav.*, 15:245-259.
- Ruggle R (1998). The state of the Notion: Knowledge management in Practice. *California Manage. Rev.*, 40(3): 80-89.
- Senge PM (1997). Sharing Knowledge, *Exec. Excell.*, 15(6): 11-12.
- Syed-Ikhsan SOSB, Rowland F (2004), Benchmarking Knowledge Management in a Public Organization in Malaysia, *Benchmarking: Int. J.*, 11 (3), 2:38-266.
- Wijnhoven F (1998). Knowledge logistics in business contexts: analyzing and diagnosing knowledge sharing by logistics concepts, *Knowl. Process Manage.*, 5(3): 143-157.
- Williams (1972), Implementation thinking skill instruction in an urban district. An effect to close the gap. *Educ. Leadersh.*, 44(6): 50-53.