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KNOWLEDGE SHARE INCENTIVE: EXPLORING OPPORTUNITIES IN RAILWAY SERVICE PROVIDER IN KAZAKHSTAN

Knowledge sharing is one of the critical activities of knowledge management. Nowadays, many companies focus on implementation of this activity and some of them should know how to motivate people in knowledge sharing. In this research the result shows for the railway transportation in Kazakhstan service provider significant influence of intrinsic and extrinsic motivation on willingness and intrinsic motivation on eagerness to share knowledge inside the organization.

Keywords: intrinsic, extrinsic, motivation, willingness and eagerness, knowledge sharing, Kazakhstan National Company (KNC).

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ОБМІН ЗНАННЯМИ: ВИВЧЕННЯ МОЖЛИВОСТЕЙ ДЛЯ ЗАЛІЗНИЦІ РЕСПУБЛІКИ КАЗАХСТАН

У статті показано, що обмін знаннями є однією з найважливіших складових управління знаннями. Зараз багато організацій зорієнтовано на розвиток цього елементу, усвідомлюючи необхідність мотивації людей до обміну знаннями. На підставі результатів досліджень, проведених в одній із компаній залізничного транспорту Казахстану, було виявлено, що існує значний вплив внутрішньої і зовнішньої мотивації на бажання і внутрішньої мотивації на прагнення ділитися знаннями в компанії.

Ключові слова: внутрішнє, зовнішнє, мотивація, бажання і прагнення, обмін знаннями, Казахстанська національна компанія.

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ОБМЕН ЗНАНИЯМИ: ИЗУЧЕНИЕ ВОЗМОЖНОСТЕЙ ДЛЯ ЖЕЛЕЗНОЙ ДОРОГИ В РЕСПУБЛИКЕ КАЗАХСТАН

В статье показано, что обмен знаниями является одной из важнейших составляющих управления знаниями. В настоящее время множество организаций сориентированы на развитие этого элемента, осознавая необходимость мотивации людей к обмену знаниями. На основании результатов исследований, проведенных в одной из компании железнодорожного транспорта Казахстана, было выявлено, что существует значительное влияние внутренней и внешней мотивации на желание и внутренней мотивации на стремление делиться знаниями в компании.

Ключевые слова: внутреннее, внешнее, мотивация, желание и стремление, обмен знаниями, Казахстанская национальная компания.

I. Introduction. Nowadays the rail transportation service (RTS) market in Kazakhstan is not facing tight competition as there is in other service provider markets (e.g., telecommunications). This sector is experiencing monopoly type of management as there only one national RTS provider with several sister companies. It is well known that in the tight competitive environment companies are forced to think how to sustain their growth in order to win and should provide variety of services to

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give much benefits to customers. There are many researches done to analyze the motivation to share the knowledge of employees in competitive environment, however, less has been written on the knowledge sharing motivation patterns at monopoly market. This paper analyses the current empirical findings on RTS regarding the motivation factors, intrinsic and extrinsic.

It also gives some conclusions and recommendations on how to sustain growth in service provision by effectively sharing the explicit & implicit knowledge of personnel. Knowledge sharing is an important part of building knowledge-based competitive advantage (Argote & Ingram, 2000; Cohen & Levinthal, 1990; Kogut & Zander, 1992). Knowledge sharing is conceptualized in terms of two knowledge sharing behaviors (i.e., knowledge donating and knowledge collecting) and two knowledge-sharing attitudes (i.e., eagerness to share knowledge and willingness to share knowledge). Knowledge sharing is the process where individuals mutually exchange their tacit and explicit knowledge and jointly create new knowledge or generate new ideas (Hooff & De Ridder, 2004; Lin, 2007; Samieh & Wahba, 2007). This means that every knowledge-sharing behavior consists of both bringing knowledge and getting knowledge.

The difference between willingness and eagerness to share was made in an effort to explain the results of a field experiment on the relationship between group norms and knowledge sharing (Hooff, De Ridder & Aukema, 2004). Willingness is defined as the extent to which an individual is prepared to grant other group members access to his or her individual intellectual capital. Eagerness, on the other hand, is defined as the extent to which an individual has a strong internal drive to communicate his or her individual intellectual capital to other group members. That means the willing people tend to collect more knowledge than they donate, however eager people achieve balance between collecting and donating. Numerous studies point to the lack of motivation as one of the barriers in knowledge sharing (Davenport & Prusak, 2001; Husted, Michailova & Minbaeva, 2005; Lin, 2007).

Motivation theories study different types of motivations. However, motivation management can better be tailored to specific needs of a particular job when different types of motivations are taken into account. Related to this reasoning, some work motivation theories distinguish between different types of motivation — notably, intrinsic and extrinsic (Frey, 1997; Osterloh & Frey, 2000).

Extrinsic motivation of an individual involved in an activity is to get a positive or to avoid a negative outcome. Typical extrinsic motivators include external rewards, such as money and praise, as well as avoidance of punishment. Individuals thus feel pressured from the outside when externally motivated. Generally, in the knowledge sharing activity, people need exchange for what they have contributed as cost, e.g., time, energy, potential loss of ownership and power. This means that individuals are willing to transfer their knowledge since they expect benefits (Bock & Kim, 2002; Lin, 2007).

In contrast, intrinsic motivation involves doing an activity because it is in accord with individual's intrinsic interest and personal values (Ryan & Deci, 2000). An employee derives enjoyment from the behavior per se (Deci, 1971; Gagne & Deci, 2005; Lepper, Greene, & Nisbett, 1973). An intrinsically motivated individual is mainly absorbed in the process of doing, whereas an extrinsically motivated individual is concerned with the external outcome attained from doing. Intrinsic motivation

therefore implies that an individual is free from pressure and tension when engaging in a particular behavior (Deci & Ryan, 1985). Intrinsically motivated people who involve in knowledge sharing process feel satisfied with their immediate needs. They are ideally motivated by achieving their self-defined goals and fulfilling tasks (Husted, Michailova & Minbaeva, 2005).

Literature also describes people who enjoy helping others (Emmerik & Jawahar, 2005). Therefore, they are the individuals participating in activities because they want to be helpful. In knowledge sharing activities, there will be people who are willing to be involved in knowledge sharing as they like to share knowledge.

According to social cognitive theory, individual attitude and behavior influenced by the self-produced factors and external agent stimuli (Bock & Kim, 2002). It is stated that self-efficacy is one of the factors that affect individual's attitude. It is defined as individual's judgment on their capability to contribute to activity. Therefore, this study includes self-efficacy as an intrinsic motivation that contributes to sharing knowledge.

It can be assumed that employees attitudes in sharing knowledge depend on intrinsic and extrinsic motivation. Specifically, eagerness to share is influenced by intrinsic motivation since characteristic of eager people have internal strong drive to contribute to sharing knowledge. However, willingness to share is influenced by intrinsic and extrinsic motivation.

Therefore this study proposes 3 hypotheses as follows:

H1- There is a significant influence of intrinsic motivation on willingness to share;

H2- There is a significant influence of extrinsic motivation on willingness to share;

H3- There is a significant influence of intrinsic motivation on eagerness to share.

II. Research Method. One of the biggest affiliate companies of the National Rail service provider that specializes in cargo wagon renting is chosen as a sample. About 75 questionnaires were obtained for the analysis. Knowledge sharing attitude items were selected from Hooff & Hendrix (ND), and motivation from Lin (2007) questionnaire. The scale used in the questionnaire was Likert scale and it was also modified and translated into local language (Kazakh). To measure construct validity and reliability, a pilot test done as well. For good sample representation the respondents were chosen from each department. In measuring construct validity, corrected item to total correlation was calculated by using STATA 11. The value of corrected item to total correlation ranges from 0.346 to 0.921, whereas the reliability is measured by Chronbach alpha. It was obtained 0.970 for the total number of items. Finally, the data were processed by STATA and further analyzed.

III. Result

Table 1 shows the result of intrinsic motivation influence willingness and eagerness to share, and extrinsic motivation on willingness to share.

Table 1. Motivation and Knowledge Sharing

Influence	R Sq	t-value
Intrinsic motivation on willingness to share	0.284	12.207
Extrinsic motivation on willingness to share	0.107	6.043
Intrinsic motivation on eagerness to share	0.208	10.380

Based on Table 1, adjusted R-Square of intrinsic and extrinsic motivation to willingness to share were obtained as 0.284 and 0.107. It indicates that willingness to share is influenced by intrinsic motivation as much as 28.40% and by extrinsic motivation as much as 10.7%. Further, t-value of intrinsic and extrinsic motivation on willingness to share are 12.207 and 6.043. The value of t-table for acceptance significant level for alpha 0.05 is 1.966. There is a significant influence of intrinsic motivation on willingness to share (H-1 is supported), and there is a significant influence of extrinsic motivation on willingness to share (H-2 is supported). Adjusted R-Square of intrinsic motivation to eagerness to share was obtained as 0.208, with t-value as much as 10.380. It indicates there is a significant influence of intrinsic motivation on eagerness to share in this company. Overall, it can be concluded that H3 is supported.

IV. Discussion. The company that was under investigation has very strict rules on knowledge sharing. The personnel have to sign the confidentiality agreement that would force any employer to get line manager's approval to send information even within the company. The reason of such strict rules is the operations of the company that involve critical transportation information. Another aspect that needs to be taken into account is that in the national companies there are many elder workers who are not willing to share any knowledge in order not to lose their position. The survey results support the hypothesis that intrinsic motivation as well as extrinsic motivation influence knowledge sharing attitude. However, the intrinsic motivation plays a bigger role on willingness to share compared to extrinsic motivation. Moreover, intrinsic motivations influence willingness and also eagerness to share.

As it was mentioned in the literature review, the level of employee involvement in the activities depends on their expectation of benefits they will obtain. These benefits can be intrinsic and extrinsic as well. However, the result of this study shows that the willingness of employees in contributing to knowledge sharing is more influenced by intrinsic motivation. It indicates that interviewed employees are willing and eager to share because they feel happy and enjoy sharing knowledge with co-workers. When the extrinsic motivation contributed to willingness to share is analyzed, it could be concluded that employees are still expecting some kind of benefit from their sharing activities.

The result of this study is not consistent with (Lin, 2007; Bock, Zmund, Kim, and Lee, 2005) studies which show that expected reward has no influence on knowledge sharing attitude. However, as it was seen in this study, extrinsic motivation has influence on willingness to share and with lower impact than intrinsic one. Thus, employee reward might be considered as the tool to push knowledge sharing activities in this company. Moreover, focusing on employee's intrinsic motivation factors that are making them internally happy, or increasing their self-esteem and importance while sharing knowledge is required as well. As a conclusion, company's management and human resources department should consider the combination extrinsic and intrinsic stimulators as monetary and non-monetary rewards for their employees. Also, they should consider bringing in and encouraging knowledge sharing activities that would create a unique culture in a company.

V. Limitation of the study. There were limitations of this study which can be grouped into main 3 groups as following: 1) local cultural view on knowledge sharing; 2) low level of the surveyed subject knowledge of the employees; 3) no detailed survey

exploration on indicators of intrinsic or extrinsic motivation that contributes to knowledge sharing. With this survey it is difficult to measure the cultural effect, subject knowledge level and detailed information effect on which part of intrinsic motivation contribute higher than the others to willingness or eagerness to share. Besides, the study did not cover fully all affiliate companies and national parent company itself.

References:

- Argote, L. & Ingram, P.* (2000). Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes*, 82, 150-169.
- Bock, G.W., Kim, Y.* (2002). Breaking the myth of rewards: an exploratory study of attitude about knowledge sharing. *Information Resources Management Journal*, Vol 15, No. 2.
- Bock, G.W., Zmund, R.W., Kim, Y.G. and Lee, J.N.* (2005). Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, social psychological forces, organizational climate. *MIS Quarterly*, Vol 29, (1), 87-112.
- Cohen, W. M., & Levinthal, D. A.* (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35, 128-153.
- Davenport, T.H., & Prusak, L.* (2001). *Tudasmenedzsmet*. Budapest: Kossuth Kiado. 196p.
- Deci, E. L.* (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18, 105-115.
- Deci, E. L., & Ryan, R. M.* (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Emmerik, I.J.H., Jawahar, I.M.* (2005). Lending a helping hand, provision of helping behavior beyond professional career responsibilities, *Career Development International*, 10 (5).
- Frey, B. S.* (1997). *Not just for the money: An economic theory of personal motivation*. Cheltenham, UK: Edward Elgar.
- Gagne, M., & Deci, E. L.* (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331-362.
- Hooff, Van Den, B., Ridder, J. A.* (2004). Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC use on knowledge sharing, *Journal of Knowledge Management*, 8 (6), 117-130.
- Hoof, van den, B., de Ridder, J. & Aukema, E.* (2004). Exploring the Eagerness to Share Knowledge: The Role of Social Capital and ICT in Knowledge Sharing. In: Marleen Huysman & Volker Wulf (Eds), *Social Capital and Information Technology*. Cambridge: MIT Press, 164-165.
- Husted, K., Michailova, S., Minbaeva, D.* (2005). Knowledge sharing and organizational performance: the role of extrinsic and intrinsic motives, *International Human Resources Management Conference*, June 14-17, Cairns, Australia.
- Kogut, B., & Zander, U.* (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3, 383-397.
- Lepper, M. R., Greene, D., & Nisbett, R. E.* (1973). Undermining children's intrinsic interest with extrinsic reward: A test of the "overjustification" hypothesis. *Journal of Personality and Social Psychology*, 28, 129-137.
- Lin, Hsiu-Fen.* (2007). Effect of extrinsic and intrinsic motivation on employee knowledge sharing intentions, *Journal of Information Science*, 33 (2), 135-149.
- Osterloh, M., & Frey, B.* (2000). Motivation, knowledge transfer and organizational form. *Organization Science*, 11, 538-550.
- Ryan, R. M., & Deci, E. L.* (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Samieh, H.M., Wahba, K.* (2007). Knowledge sharing behavior from Game theory and Socio-Psychology perspective, *Proc. of the 40th Annual Hawaii International Conference on System Sciences*.

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