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Factors affecting knowledge sharing in enterprises: Evidence from small and medium enterprises in Vietnam

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ABSTRACT

Today, knowledge gradually becomes an important resource for the competitiveness of enterprises (businesses). For small and medium enterprises (SMEs) in Vietnam, knowledge sharing (KS) is a necessary condition to increase labor productivity and ensure the sustainable development of businesses. However, encouraging KS among employees requires management to understand the motivational factors of KS and set out appropriate policies. This study is based on the research model of Burgess (2005) [Burgess, D. (2005). What motivates employees to transfer knowledge outside their work unit? The Journal of Business Communication (1973), 42(4), 324-348.] and related theories to identify psychological motivational factors that affect KS. The study conduct surveys in 400 SMEs to assess the impact of the factors on KS in Vietnamese SMEs. The results show that the factors like rewarding; Fear of losing power, Concepts for self-interest, promoting the role of the group, the concept for social benefits affect KS, significantly. From this result, the study also proposes a number of recommendations to improve KS motivation of Vietnamese SMEs' employees. At the same time, through quantitative research, the author identifies the factors affecting the knowledge sharing behavior of SMEs in Vietnam. Research results indicate different factors; including teamwork, cohesion, trusts, reward system, information technology system, communication with peers, the concern of senior management are correlated positively with employees' knowledge sharing behavior.

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1. Introduction

In the current economy, knowledge is an important asset of the organizations, especially for small and medium-sized companies that reply on knowledge resources, such as finance, consulting, design, technology. Moreover, many previous studies show that knowledge needs to be transferred and shared between individuals and units. They can promote and create value and revenue for the organization (Drucker, 1993). Although people are aware of the importance of knowledge sharing (KS), policy making to encourage and encourage KS within the company remains a major challenge. The KS within the company always encounters barriers such as lack of time, fear of losing power, fear of disadvantage when talking about failures, inferiority complexes, etc. To solve the above difficulties, at the same time, contributing to building a skilled staff and improving the competitiveness of the company, it is necessary to study and evaluate motivational factors to motivate employees of the KS company together. From those evaluation results, policies and solutions to improve KS motivation can be proposed. This article focuses on the different objectives. The study identifies the motivations that affect the KS of employees in SMEs in Vietnam, determines the impacts of factors among employees, and proposes some solutions to improve KS motivation among employees. The study explains that to enhance KM in any organization, each employee requires communication skills, professional knowledge, showing professionalism, high accuracy in handling work and must be dynamic and creative, being able to capture and forecast market information to advise each customer to use the most suitable products and services. Therefore, among employees, there must be a good coordination among different departments to perform KM smoothly.

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2. The theoretical background and the study method

2.1. Literature review

Knowledge: According to Nonaka and Takeuchi (1995) "knowledge is a dynamic process of man in proving personal beliefs with facts". The evolution of scientific epistemology has formed a hierarchical structure which is in the order of data, information and it leads to knowledge, increasing in two ways: understanding, and contextual independence (Serban & Luan, 2002). Polanyi (1966) classified knowledge into two categories: (1) hidden knowledge (tacit) in human heads, elusive, and (2) explicit knowledge which can be performed, captured easily.

Knowledge management is the process of recognizing, sharing, using and practicing knowledge within the organization (Choi & Lee, 2018). For effective traffic management, a management cycle needs to be established, including many steps from grasping, to using knowledge. Dalkir (2005) synthesized previous traffic management cycles and introduced an integrated 3-step management cycle, namely: Capture and create knowledge, Distribution and KS, and Search and use knowledge. In particular, the second step is assessed as very important for managing hidden knowledge sources.

Knowledge Sharing (KS) is the process of transferring knowledge (especially hidden knowledge) from one person to another, at the individual level (exchange) or collectively (training). This is an important stage of the traffic management cycle, which ensures the success of KM, because hidden knowledge (which accounts for the majority of knowledge resources) can be captured and shared throughout the company. Promoting KS is a big challenge for managers, because employees often do not want to share information with others (due to fears of losing power). In this study, the time spent on KS is used to measure KS among employees in the company.

Motivation is often understood as an individual's motive towards self-interest (Osterloh & Frey, 2010). Psychologists often use a broader definition, including other motivational sources, such as bringing a group's benefits or benefits to a social network (Snyder & Cantor, 1998; Vu, 2019). This study uses a broad definition of KS motivation. At the same time, a functional approach to motivation in a broad sense is also used. In particular, an act will reflect many psychological functions of people, depending on the characteristics of that person (e.g. personality, organizational context ...). Some studies following this approach suggest that motivation can be categorized into personal, relational, or group motives. In addition, the cultural context also affects the KS motivation of individuals (Snyder & Cantor, 1998).

Kothuri (2002) emphasizes that knowledge in the organization is considered intellectual capital and exists in two main forms that are existent and hidden. Knowledge is less dependent on people, can be systematic, measurable, and popular and stored, including information and communication skills and data transmission to others. Hidden knowledge depends very much on individuals and can be created by processing information combined with knowledge and experience. According to Zack et al. (2009), most of the knowledge in organizations is hidden so it is difficult to connect with each other. Because knowledge is always in the individual's brain, including many cognitive skills such as beliefs, images, intuition and skills, not documents and vouchers, it is difficult to interpret or describe knowledge in a clear way.

According to Cabrera et al. (2006), knowledge sharing can help employees share their knowledge and experience to help projects and completion plans quickly and economically. In addition, KM is associated with individuals in sharing with organizing information, ideas, suggestions and proficiency to others. According to Maponya (2005), it is shown that knowledge sharing is based on experience gained during internal and external work. If knowledge is available within the members, the organization will minimize duplicate decisions and solve problems faster. Effective knowledge-sharing activities will help reuse the knowledge of each individual and raise knowledge to a new high. Von Krogh et al. (2000) argue that knowledge sharing is also important in creating new knowledge and leveraging them to improve the performance of businesses. KM is an important means through which employees can contribute to the application of knowledge, innovation and ultimately the company's competitive advantage (Jackson et al., 2006).

3. Research method

The author uses qualitative research methods and quantitative research. Qualitative researches explore the factors affecting knowledge sharing behavior and adjust the scales of the elements for the proposed research model. Quantitative research is used to measure the impact of factors on knowledge sharing behavior in Vietnamese SMEs. Sample size for research is based on convenient sampling including 800 employees working in SMEs in Hanoi, Da Nang, Ho Chi Minh City and Can Tho. The author uses the technique of processing and analyzing data using SPSS 20.0 software.

3.1. Related studies

Several studies related to knowledge sharing and transfer are summarized in Table 1 as follows.

Table 1 Summary of relevant studies

| Author | Research results | Research methods | Factors |
|--------------------------------------|---|---|--|
| Lee and Ahn (2007) | Individual rewards have greater effects than group rewards in promoting encouragement. Share of employees in the organization. | Survey and qualitative analysis in Korean enterprises | Personal rewards, group rewards |
| Ismail Al- Alawi et al. (2007) | The study helps enterprises understand the role of organizational culture in accumulating knowledge and expanding knowledge so that they can take advantage of their expertise. | Qualitative survey of public and private companies in Bahrain | Reliability, communication, information systems, rewards and organizational structure |
| Cabrera et al. (2006) | Personal effectiveness, experience expansion, support from influential teammates and supervisors on KS. | Survey and quantitative analysis on 372 employees of a US multi- national company | Psychological variables, availability and quality of KM, rewards |
| Ko et al. (2005) | Unfriendly relationships have a negative impact on knowledge transfer; The knowledge of sharing, the ability to acquire internal motivation and reputation of transferors positively impact knowledge transfer. | Quantitative research with data collected from consultants and customers of 96 ERP projects for more than 6 months. | Mutual understanding, unfriendly relation- ship, receptive capacity, communication mo- tivation, reputation of transferors |
| Rosendaal (2019) | Sharing knowledge, difference and working in a team | Quantitative survey 1 sample 169 respondents, from 30 groups of 1 multinational company | Social similarity in groups, diversity, interdependence |

(Source: compiled by the author)

3.2. Hypothesis and research model

The proposed study of this paper adopts the method originally developed by Burgess (2005) as follows:

- The topic of research on psychological motivation (individual, group) is consistent with the problem of this study.
- Appropriate for the survey subjects: in small and medium-sized enterprises in Vietnam, it can be divided into different groups. Therefore, sharing and finding knowledge often occurs among other employees.
- In addition, the phenomenon of "fear of knowledge sharing" is due to controversy, or "fear of seeking knowledge" with other groups, which is reported to occur in Vietnamese small and medium enterprises.

Through a preliminary qualitative survey, the group's motor and relational factors in Burgess's study (2005) were found to be similar, so they were included in this study. Thus, factors affecting KS include Reward, Fear of power loss (Individual motivation), Highlighting group roles, Lack of capacity (Relationship motivation), Social benefits conception Assembly, Concept of self-interest (Exchange culture).

Likes to reward: researchers have determined that "rewarding for sharing knowledge" is an important driving force in KS. Some companies that have been considered to be at the forefront of traffic management have used many rewards to reward employees' KS. Rewarding for KS has demonstrated the effect of increasing knowledge sharing with actual working units. Since then, hypothesis H₁ is stated:

H₁: Employees' motivations are rewarded with positive impacts on KS among employees in the organization.

Fear of power loss: Knowledge is often seen as a basis to ensure power in the organization. Therefore, this concept will lead to psychology that does not want KS for fear of losing power. The fear of thinking "will diminish one's own value when it is no longer exclusive of that knowledge", or "your previous mistakes will be known by everyone" will hinder the KS. From that hypothesis H2 is stated:

H₂: Fear of losing power due to KS has negative impact on knowledge sharing among employees in the organization.

Highlighting team roles: One of the obstacles on knowledge sharing is that employees can define many groups within the company they belong to, such as project teams, functional groups, or ministries. Accordingly, such employees often value their small units more than the entire organization, resulting in a reduced ability to share information outside their small units (Burgess, 2005). Thus, hypothesis H3 is stated as follows,

H₃: The group role has a negative impact on KS among employees of different groups in the organization.

Feeling incompetent: Finding knowledge can sometimes adversely affect a person's reputation if it is viewed as a lack of ability. Through seeking help, the employee publicly acknowledges the helplessness, and depends on others. Finding knowledge can be particularly difficult in companies in countries where individuality is highly appreciated, in which competition is more appreciated than cooperation. In Vietnam, individuality is less appreciated, but in the context of globalization, competition in work is becoming increasingly important. Since then, the hypothesis H₄ is stated:

H₄: Feeling incompetent when searching for knowledge has a negative impact on KS among employees in the organization.

The concept of social / self-interest benefits: A cross-cultural comparison of computer engineers in the US and India demonstrates the impact of exchange culture on knowledge sharing. In contrast to Indian employees, those who are willing to take KS (oriented towards social benefits) help anyone who needs it, American employees only help their colleagues in the sense of "reciprocity" (to direction of self-interest). Vietnamese culture has many similarities with Indian culture (social benefits orientation). However, with the trend of integration, a part of Vietnamese staff has also gradually changed towards promoting self-interest. The result of the orientation of social benefits is to promote KS, on the contrary, orienting people to limit knowledge exchange among employees in the company. From that hypothesis H₅ and H₆ are stated.

The scale formation is inherited from previous studies accomplished by Burgess (2005) in which, the factor of commendation and reward has 6 observed variables, Fear of power loss is covered with 3 observed variables, Highlighting group role includes 4 observed variables, Inferiority complex and Quan concept of social benefits with 3 observed variables, and finally the concept of self-interest includes 5 observed variables. To ensure the value of the content of the scale, a qualitative research through hands-on discussion is used with managers and employees of Vietnamese SMEs. Then the scale is adjusted and added to the words appropriate to the research context. The scale of independent variables is designed with the 5-point Likert scale. The scale of the dependent variable alone is measured by the average number of hours of knowledge sharing per month.

H₅: The concept of social benefits has a positive impact on KS among employees in the organization.

H₆: The concept of self-interest ("over and over") has a negative impact on KS among employees in the organization.

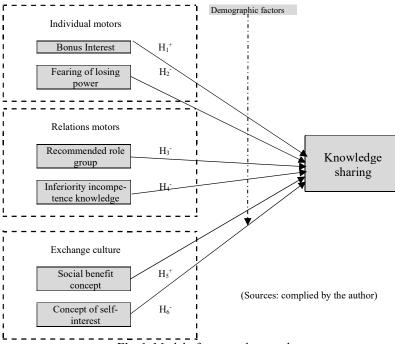


Fig. 1. Model of proposed research

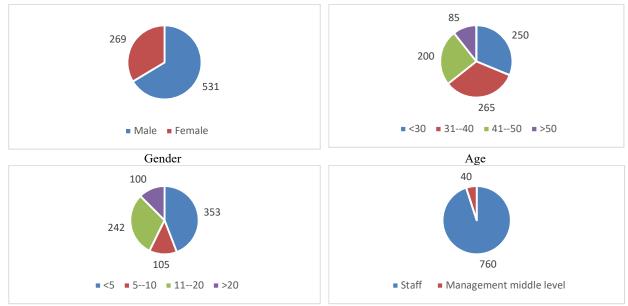
In addition, demographic factors (gender, age, experience, working position) also affect the KS between employees. The above hypotheses can be summarized in the following research model (Fig. 1). The research sample is selected by a convenient method. The minimum sample size is 400 small and medium enterprises, with 800 questionnaires sent to employees. Survey questionnaires are sent by e-mail and paper to managers to distributes to survey, design and supervision engineers. The number of questionnaires transferred was 806 results, after removing 6 questionnaires which were not valid, remaining 800 valid votes, reaching the rate of 99.25%. All valid samples will be processed with SPSS 20.0 software to conduct reliability analysis, EFA discovery factor analysis, correlation analysis and multivariate regression to test hypotheses. In addition, the mathematical analysis of comparisons is also used to consider differences in KS among groups of employees.

4. Research results

4.1. Descriptive statistics

We first present personal characteristics of the participants who took part in this survey through Fig. 2. As we can observe from the results of Fig. 2, more than half of the participants were male aged less than 40 and with at least five years of job experience. Cronbach's alpha coefficient is used to eliminate unsuitable variables. The variables are satisfactory when the alpha coefficient is greater than 0.6. After eliminating the 2 variables of the factor highlighting the group role and the 2 variables of the concept of self-interest, all groups of factors have the required Cronbach's alpha coefficients and the variable-

total correlation coefficient is greater than 0.3 so the scale of the factor groups has achieved reliability and can be included in factor analysis.



Years of Job Experience

Position

Fig. 2. Personal characteristics of the participants

Table 2 Cronbach's alpha reliability analysis

| Encoding | Element group | Number of variables | Coefficients α |
|----------|-------------------------------|---------------------|----------------|
| NT1 | Likes to reward | 6 | 0.881 |
| NT2 | Fear of losing power | 3 | 0.772 |
| NT3 | Role of group | 2 | 0.630 |
| NT4 | Lack of capacity | 3 | 0.858 |
| NT5 | Social benefits conception | 3 | 0.932 |
| NT6 | Perspectives on self-interest | 3 | 0,635 |

(Sources: complied by the author)

After checking the consistency of the scale, the scales will be evaluated by exploratory factor analysis (EFA). KMO and Bartlett tests in factor analysis show that KMO coefficient = 0.772 (sig. = 0.0) approves the EFA analysis. With Eigen value value> 1 (Principal components extraction method and Varimax rotation method), 5 factors can be extracted with extract variance of 65.5%> 50% (satisfactory). The independent variable scale has weight> 0.5 (satisfactory). However, there are 3 variables of factor 4 (Lack of capacity) to download more than 1 factor and the level of difference <0.3 should be eliminated. The final EFA results are summarized in Table 3.

Table 3Factor analysis results for independent variables

| | | Factor | | | | |
|--------|---|--------|-------|-------------|-------|---|
| Coding | Observed Variable | 1 | 2 | 3 | 4 | 5 |
| NT1-5 | Increased credibility with your superiors | | | | | |
| NT1-4 | Recognized by superior | 0.838 | | | | |
| NT1 -6 | recognized and rewards | 0.776 | | | | |
| NT1-3 | be colleagues assessed positively | 0.765 | | | | |
| NT1-2 | Increased chance of finding a job more suitable | 0.736 | | | | |
| NT1-1 | Increased opportunities for promotion | 0.640 | | | | |
| NT2-3 | the holder keep much knowledge will be successful | | | 0.804 | | |
| NT2-1 | Knowledge is considered the most important | | | 0.797 | | |
| NT2-2 | Knowledge is considered a valuable resource | | | 0.755 | | |
| NT3-2 | Share about failure to outsiders who bring in bad results | | | | | |
| NT3-1 | Not comfortable to share with people outside the project team | | | | | |
| NT5-2 | Feeling satisfied by contributing to help others | | 0.855 | | | |
| NT5-3 | Share k Experience is personal enjoyment | | 0.839 | | | |
| NT5-1 | Strengthening the relationship in the working environment | | 0.780 | | | |
| NT6-4 | Recipient of knowledge should show appreciation in a specific way | | | | 0.834 | |
| NT6-5 | KS needs responded | | | | 0.748 | |
| NT6-2 | The who had KS requested to be re-shared | | | (Sources: o | 0.653 | |

(Sources: complied by the author)

Therefore, the research model has been adjusted as shown in Fig. 3.

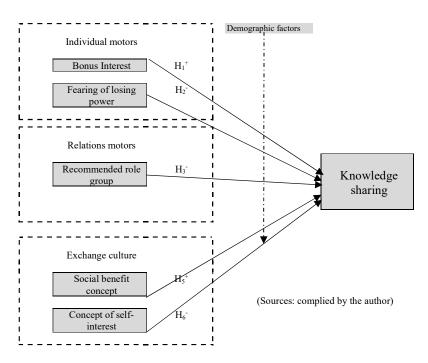


Fig. 3. The modified model

4.2. Analysis and regression

Pearson test results between 5 independent variables and one dependent variable (summarized in Table 4) show that all independent variables are correlated closely with the dependent variable at 99% confidence level with correlation coefficients> 0.3. However, some independent variables are also correlated with each other, so the multi-correlation phenomenon is needed after analyzing the factor EFA, factor 4 (Incompetent feeling) is completely removed when considering regression analysis.

 Table 4

 Correlation analysis between the independent variables and the dependent variable

| | NT1 | NT2 | NT3 | NT5 | NT6 | KS |
|-----|---------|----------|---------|---------|---------|----------|
| NT1 | 1 | -0.051 | 0.245** | 0.369** | 0.207** | 0.579** |
| NT2 | -0.051 | 1 | -0.046 | -0.197* | 0.109 | -0.398** |
| NT3 | 0.245** | -0.046 | 1 | 0.446** | 0.054 | 0.359** |
| NT5 | 0.369** | -0.197* | 0.446** | 1 | -0.165* | 0.382** |
| NT6 | 0.207** | 0.304 | 0.054 | -0.165* | 1 | 0.109** |
| KS | 0.579** | -0.398** | 0.359** | 0.382** | 0.304** | 1 |

^{**.} Correlation is significant at 0.01 (2-tailed).

(Sources: complied by the author)

Table 5 shows that the regression model is relatively suitable for 99% reliability. The results of the adjusted R-Square coefficient is equal to 0.567, which means that the model can explain 56.7% of the overall relationship between the motivational factors of employees' KS.

Table 5 Summary regression

| | | | Adjusted R-Square | Standard Error (SE) |
|---|--------|-------|-------------------|---------------------|
| 1 | 0.762a | 0.580 | 0.567 | 3.439 |

- a. Predictors: (Constant), NT1, NT2, NT3, NT5, NT6
- b. Dependent Variable: knowledge sharing (KS)

(Sources: complied by the author)

Next, we present the results of ANOVA test in Table 6. As we can observe from the results, the F-value is statistically meaningful when the level of significance is five percent.

Table 6Analysis of variance ANOVA

| Model | | sum of squares | Df | Average squared | F | Sig. |
|-------|------------|----------------|-----|-----------------|--------|-------|
| 1 | Regression | 2535.518 | 500 | 507.104 | 42.882 | .000a |
| | Residual | 1832.979 | 300 | 11.826 | | |
| | Total | 4368.497 | 800 | | | |

- a. Predictors: (Constant), NT1, NT2, NT3, NT5, NT6
- b. Dependent Variable: Knowledge Sharing (KS)

 Table 7

 Analysis results Regression by Step wise method

(Sources: complied by the author)

| | | Coefficient of un-normalized | | Coefficient Standardized | | |
|-------|------------|------------------------------|------------|--------------------------|---------|-------|
| | | Beta | Std. Error | Beta | | |
| Model | | | | | t-value | Sig. |
| 1 | (Constant) | -1.484 | 2.173 | | -0.683 | 0.496 |
| | NT1 | 2.627 | 0.370 | 0.417 | 7.109 | 0.000 |
| | NT2 | -2.202 | 0.314 | -0.374 | -7.017 | 0.000 |
| | NT3 | 1.008 | 0.348 | 0.170 | 2.896 | 0.004 |
| | NT5 | 0.844 | 0.443 | 0.123 | 1.907 | 0.058 |
| | NT6 | 1.898 | 0.392 | 0.270 | 4.839 | 0.000 |

(Sources: complied by the author)

4.3. Testing the Hypotheses

Based on the results of regression analysis, test the hypotheses of the model given. Hypothesis test results are summarized as follows:

- H_1 : beta = 0.417, accepted (sig. <0.05)
- H_2 : beta = -0.337, accepted (sig. <0.05)
- H₃: beta = 0.170, accepted (sig. <0.05), contrary to the original hypothesis (due to dependent variables regardless of KS with inside or outside the group).
- H₄: not tested (excluded from EFA)
- H_5 : beta = 0,123, accepted (sig. <0.10)
- H₆: beta = 0.270, accepted (sig. <0.05), contrary to the original hypothesis (because the perception of "having and having it back" requires the recipient of knowledge to be responsible for the opposite KS, thus contributing to promoting KS).

4.4. Comparison of average value (AV)

According to the above results, the timing of KS among employees of Vietnamese small and medium enterprises is low and between groups has a relatively low difference (<0.5), indicating that there is not much differences between groups. This requires a policy to encourage KS among employees. Among the influencing factors, NT5 (social benefits concept) has the highest av (3.95) and NT2 (fear of power loss) with the lowest av (2.84). This proves that the current awareness of staff supports well for KS (in accordance with av H5 (+) and av H2 (-). Therefore, it is necessary to further improve the concept of social benefits, and reduce the fear of losing power when the KS.

4.5. Discussing the research results the research

The results show that the KS of employees is influenced by motivational factors, ranking from strong to weak, which include: Like rewarding ($\beta = 0.417$), Fear of loss of power ($\beta = -0.374$), Conception of self-interest ($\beta = 0.270$), Highlighting group roles ($\beta = 0.170$) and Social benefits conception ($\beta = 0.123$). The regression analysis results yield adjusted $R^2 = 0.567$, meaning that KS explained by the above 5 factors is 56.7%. Compared with Burgess's study (2005), the above analysis results are similar to the previous results, only in the degree of influence of the factors. In both studies, the reward factor has the highest beta. This is a measure that has a strong impact on employees' KS behavior. However, unlike this study, the concept of self-interest in previous research has a negative impact on KS (beta = -0.10). The difference can be explained by the fact that the scale of this factor is understood as fairness, so if we have received knowledge from others, then it is the responsibility of the KS to go back. In the context of Vietnamese small and medium-sized enterprises, the KS is widely encouraged, so it also promotes the response of KS. To be able to use the survey results in the subsequent assessments, the author must test the reliability of the data through the use of the Cronbach's Alpha coefficient. The scale only ensures reliability when Cronbach's Alpha coefficient> 0.6 variable correlation coefficients - total> 0.3.

Evaluation of scale reliability

Trust has Cronbach's Alpha coefficient = 0.812> 0.6. The observed variable NT4 has the total variable correlation coefficient = 0.194 < 0.3 so this observed variable is eliminated. The remaining observed variables have the total variable correlation coefficients> 0.3 and, if removed, do not increase the Cronbach's Alpha coefficients. The results of the reliability analysis of the second confidence scale with Cronbach's Alpha coefficient = 0.875> 0.6 the observed variables have the total variable correlation coefficients> 0.3 and if removed, do not make Cronbach's coefficient Alpha increased, so the scale reached reliability and the observed variables after removing NT4 were retained for the next EFA analysis.

Evaluation of scale reliability

The cohesion has Cronbach's Alpha coefficient = 0.738> 0.6. The observed variables have the total variable correlation coefficients> 0.3 and, if removed, do not increase Cronbach's Alpha coefficients, so the reliability scale and the observed variables are retained for EFA analysis next.

Scale reliability tests the Behavior sharing knowledge. Thus, the scale of the study is reliable. The scale of the factors will be used in the next factor analysis to measure the convergence of the scale.

Analysis of EFA independent variables

The EFA analysis of the first independent variables with KMO = 0.901 > 0.6 shows that EFA analysis is appropriate, Bartlett's Test with Sig coefficient = 0.000 < 0.5 shows that observed variables are closely related. With Eigenvalues = 1.130 > 1, the result turns the data factor into 7 elements. The variance extracted = 63.058% indicates that these 7 factors explain 63.058% of data variability. However, observed variables NT4, GK5 have load factor < 0.5, so they are eliminated for EFA analysis 2.

The load factor of each observed variable represents a value of greater than 0.5, so the observed variables are satisfactory and no observed variables are excluded. The results of the correlation analysis between the independent variables and the dependent variables show the correlation with high correlation coefficient and significance level. This shows that the independent variables have a good correlation with the dependent variable, which is a necessary condition to use independent and dependent variables in regression analysis.

Testing the conformity of the overall model

Determination coefficient $R^2 = 0.645$ and Adjusted R-Square = 0.636 show that 7 independent variables explain 63.6% of the variation of the dependent variable of knowledge sharing for employees at Vietnamese SMEs. This demonstrates that these 7 independent variables have a close relationship with the Knowledge Sharing Behavioral dependent variable and can be used for regression analysis of 7 independent variables to knowledge sharing behavior. In the ANOVA analysis, Sig value = 0.000 < 0.05 so the ANOVA analysis has ensured statistical significance, thereby showing that the regression model is overall suitable. If we conclude that these 7 independent variables affect the knowledge sharing behavior, the reliability of 95% is guaranteed. Detecting violations assumes the independence of the remainder through Durbin-Watson statistics (d). This quantity d has a variable value from 0 to 4. With statistical data we have Durbin-Watson coefficient in analysis by 2, meeting the requirement 0 < Durbin-Watson < 4 and it shows that, there was no auto-correlation phenomenon among the residuals.

Verification of multicollinearity phenomenon

VIF coefficient in the analysis of each element is less than 10 (NT: 1.546; KT: 1.863; LVN: 1.850; DN: 1.693; QL: 1.883; CN: 1.558; GK: 1.873) which indicates that the multicollinearity phenomenon between independent variables in the model is not violated. Finally, the model is summarized as follows,

Knowledge sharing = $0.366 \times$ Group work + $0.168 \times$ Mounting + $0.122 \times$ Faith + $0.115 \times$ Bonus system + $0.114 \times$ Information technology system + $0.110 \times$ Communicating with copper career + $0.105 \times$ The interest of senior management.

5. Conclusions and recommendations

Research results have shown that factors affecting knowledge sharing behaviors of Vietnamese SMEs include: teamwork; Mounting; Faith; Reward system; Information technology system; Communicate with colleagues; The interest of senior management. Since then, the authors have made the following recommendations:

Working element of the group

Business leaders should promote teamwork in the new product development of project sections. They need to be trained on teamwork skills, group management, should assign business targets for each employee, department, department, branch to

each employee of each department, department, branch must always cooperate with each other to share experiences and expertise, work together for each other to work more effectively together and finally reach the assigned work plan targets.

Cohesion factor

In order to increase the cohesion between employees to promote knowledge sharing behaviors of employees and leaders, it is necessary to strengthen the development of monthly, quarterly and year-end reward policies for employees with sales high. There should exchange some activities among employees to effectively create good internal connections enterprise.

Confidence factor

Business leaders need to pay attention to the training of highly qualified staff to meet the work needs, serve customers' needs well, and promote bank development. At the same time, leaders have policies to encourage good employees to share experiences for colleagues; encourage new employees to work boldly to ask for support from colleagues, good employees with professional weak people, new employees, so that they can promote their personal abilities and share with colleagues in professional.

Reward system elements

SMEs in Vietnam need to build a more detailed reward system, creating conditions for employees to develop themselves fully. There are timely and commendable forms of reward, throughout the system to promote the capacity of each employee and contribute to the system.

Information technology system elements

It is necessary to take measures to build a system of exchange channels via the internet, exchange with high technology to create convenience for employees. Enterprises need to complete the center management system for continuous training and updating for electronic libraries. Develop a plan to assist employees in technology equipment to serve the exchange of knowledge, the support can be financially or directly by synchronous equipment with reasonable costs, meeting the requirements technology, ability to exchange and work online. At the same time, encourage employees to use information technology to share knowledge with colleagues.

Communication elements with colleagues

Managers need to be interested in communicating directly with employees to understand the feelings and aspirations of each employee. Organizing meetings, group meetings, and outdoor activities among members of the working group is an issue that needs to be accomplished. Businesses need to focus on building a culture of communication with workplace colleagues, so that all employees' opinions are heard, helping employees to be more confident and motivated in proposing ideas, sharing specialized knowledge. Subjects and work experience for colleagues.

Concerns of senior management

In order to promote knowledge sharing among employees, business leaders need to encourage and motivate knowledge sharing within staff, while improving the role of directing from management level and developing regulations on rewarding, recognizing the contribution of management level. In working sessions with employees, leaders need to strengthen listening and demonstrating experience and knowledge in quality assessment, the value of shared knowledge, choosing valuable shares to continue share in the next talks, to introduce all employees to useful knowledge. From the survey results, the recognition and reward of the company significantly affects KS motivation. Therefore, this is a priority direction to improve the KS motivation of employees. Reward should include material rewards and spiritual rewards. In addition, for the reward to be effective there should be a system to assess the contribution and KS of each person. The use of management information systems (forums, wikis, intranet, ...) to record work performance, combined with indicators related to KS (quantity, quality, time, ...) will contribute to firms. Through these results, employees in SMEs in Vietnam are less afraid of losing power. However, the regression model shows that this factor also has a great influence on KS (negative direction). This factor is influenced by reward policy and corporate culture. To reduce the impact of this factor, business leaders should: (1) Recognize and reward KS in a timely manner, in order to make good impact of KS to overcome the worrisome impact of KS, (2) Change company culture towards encouraging sharing, helping employees understand "knowledge is power, but KS brings greater power". From the results of data analysis, the concept of self-interest has a significant influence on KS. Although this is contrary to the original hypothesis, it is possible to explain this in the order to give and receive knowledge. If employees think that they must receive it first and then give it later, they will obstruct the KS, but if they are aware that they will receive it over and over, they will contribute to promote KS. Therefore, business leaders need to have policies to encourage KS based on "back and forth" benefits among employees. Need to build organizational culture towards raising awareness "more sharing, more receiving more", this will contribute to promote KS within the organization. Also, from the analysis results, the staff highly appreciated the group role. However, contrary to the hypothesis, this does not reduce KS but increases KS. This result can be explained by the cultural characteristics of Vietnamese SMEs. The balance between competition and cooperation among groups has contributed to promote KS. This is the point where the Board of Management needs to promote through the construction and maintenance of its corporate culture. In addition, the concept of social benefits also has a positive impact on KS. Since then, managers need to emphasize the spirit of cooperation among employees for the common benefit of the

whole company. The organization of common events, towards social benefits, the movements of mass organizations (social charity, donations, visits, collective activities...) also contribute to raising awareness this. In summary, this study has contributed to reaffirming the previous research results of Burgess (2005) in the Vietnamese context, that is, individual motivational, relational, and exchange culture factors affect the KS among employees.

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