



SIM 2017 / 14th International Symposium in Management

Influencing Factors and Outcomes of the Learning by Sharing Process

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Abstract

The merging of organizational learning theory and knowledge management in recent years has given rise to important insights regarding the learning process and knowledge transfer that still requires much reflection in order to be integrated into practice. However, few studies could be found in literature which focus on what and how the influencing factors are related to organizational learning and knowledge sharing taken as a synergistic process. The purpose of this paper is to identify the influencing factors and outcomes of the learning by sharing process within small and medium organizations located in Nord-East region of Romania. The research target population consists of employees from private sector, regardless the dimension or field of activity, with a sample of 280 filled questionnaires. Thus, the article presents a statistical analysis of the relationship between the influencing factor as inputs, learning by sharing as process, and outcomes. The practical implication of this study is to promote the understanding of how organizational knowledge-based resources can be grown and used by promoting of strategies based on knowledge management and organizational learning initiatives.

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Peer-review under responsibility of SIM 2017 / 14th International Symposium in Management.

Keywords: Knowledge management; Learning by sharing process (LSP); LSP influencing factors and outcomes

1. Introduction

The process of knowledge creation and sharing are already known as pillars of competitive advantage. However a small amount of theory or empirical research focuses on the analysis of the relationship between learning and

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knowledge sharing. Far fewer have directed attention to a joint study of these processes (learning by sharing). Most of studies in the literature are mainly concentrated in terms of educational, academically and less on practical and economic perspective. Moreover, literature on process of organizational learning and knowledge sharing is widely discussed both in terms of influence factors and their outcomes. Yet, few studies have focused on learning by sharing as a single process. Therefore, the current article aims to focus on analysing the learning by sharing process in terms of individual, organizational influencing factors and outcomes of it (Pohontu, 2013).

The research approach was the premise that not only the motivation for the knowledge sharing is important but understanding the causal factors of individual nature and organizational respectively. After all, even when individuals are convinced about the need for learning by sharing, by who should the learning by sharing is referred to; learning by sharing may not take place unless the actors involved have a strong motivation for the learning by sharing to take place.

In order to achieve the main purpose, previously mentioned, the research will pursue the following main sub-objectives: [O₁] evaluation and analysis of a prediction model of learning by sharing behaviour and its individual factor, [O₂] evaluation and analysis of a prediction model of learning by sharing behaviour and its organizational factor, [O₃] evaluation and analysis of a prediction model of learning by sharing behaviour and its individual and organizational benefits.

2. Learning by sharing – a new old concept

Since business environment is experiencing a great dynamic, and organizations must be able to quickly acquire new skills, to identify and share best practices, to learn from their mistakes, learning and knowledge are in first foreground in that facilitates the acquisition of new behaviors necessary to adapt to new changes (Istrate & Herghiligiu, 2016; Luca et al., 2016). Starting with competences, abilities and finishing with intellectual operations and knowledge, all are acquired through learning activities (Pohontu, 2013).

The knowledge accumulation and association with learning has intrigued mankind for centuries. Despite claims academic and philosophical of Plato's time, organizations still seem unclear as to how the concept of organizational learning can improve organizational performance and long-term profitability of the business. Despite the confusion, the acceptance of interest in organizational learning on business survival increased significantly in the 1990 (Senge, 1990).

The merging of organizational learning theory and knowledge management in recent years has given rise to important insights regarding learning process and knowledge transfer that still requires much reflection in order to be integrated into practice. The assembly of traditional perspective of each of the areas involved sparked sophisticated discussions about the learning analysis unity (Stacey, 2003), the nature of knowledge as well as how the learning process contributes to organizational knowledge (Spender, 1996).

The current article explores the merger's inherent opportunities of looking at organizational learning and knowledge sharing within the organization through a single lens by using the complexity theory as a tool for integration. Merging the concepts from literature provides support for a holistic view on learning and knowledge transfer in organizations and demonstrates the value of a adaptative complex system (Pohontu, 2013).

In recent literature, authors in the field of organizational learning and knowledge management began to develop learning and knowledge – based strategies. The authors Bierly and Chakrabarti (1996) define knowledge – based strategies as a strategic set that forms the organizational learning process and determines the organizational knowledge basis. In contrast to this definition, Zack (1999) suggests that knowledge – based strategies include explicitly the notion of adaptation to the organization's business strategy. This author suggests that knowledge – based strategies describe an approach of organization's intention to adapt knowledge – based resources and capabilities to the intellectual needs of the business strategy (Pohontu, 2013).

There are also initial efforts of organizational learning and knowledge management of understanding the strategies dimensions – based on learning and knowledge. As part of the knowledge – based strategy typology, authors Bierly and Chakrabarti (1996) describe four tensions in the learning process: the tension between internal and external learning, radical and incremental learning, fast and slow learning and narrow and broad knowledge base. Based on these aspects, the author Zack (1999) adds that knowledge – based strategy includes decisions on creation, development, and knowledge resources and capabilities administration of an organization. These decisions

are represented by the choices between internal and external knowledge, and between exploration and exploitation. Furthermore, the author Argote (1999) highlights a list of learning processes tensions that define the knowledge – based strategy. These tensions relate to group and organizational learning heterogeneity and standardization, learning through planning and work. Some authors, such as Wiig et al. (1997) believe that organizational learning is part of knowledge management strategy while others assert that knowledge management is a strategy of organizational learning implementation.

3. Individual, organizational factors and outcomes of learning by sharing

Motivators are psychological processes that cause, direct, intensify or influence a behavior's persistence (Locke & Latham, 2002). Many researchers have investigated the motivators' role on knowledge transfer and showed that effective guidance can raise the employees' level of availability to it. In some cases, individuals may be reluctant to knowledge transfer behavior. Thus the application of motivational factors to stimulate the knowledge transfer is essential.

Many studies have been done in order to group the intrinsic and extrinsic motivational factors' characteristics. In this respect, authors Deci and Ryan (2000) undertook a more empirical research on the differences between intrinsic and extrinsic motivation, eventually saying that the difference was not obvious. Intrinsic motivation is defined as performing an action due to its inherent satisfactions, rather than some separable consequences. An intrinsically motivated person agrees to the idea to act for the fun or to find in it a challenge, rather than with external pressures or rewards. For individuals, intrinsic motivation is not just a form of motivation but an omnipresent and an important one. Although in a way intrinsic motivation exists in the relationships between individuals and activities. Despite the fact that intrinsic motivation is clearly very important, most of the undertaken activities does not take into account such a motivation (Pohontu, 2013). Similarly to intrinsic motivation, extrinsic motivation is a design that refers to the results obtained by performing an action. Extrinsic motivation, unlike the intrinsic one that refers more to a psychological motivation, relates to the instrumental value (Deci & Ryan, 2000). In other words, extrinsic motivation refers to factors that have their origin within the individual. An intrinsically motivated behavior is the one initiated by a person who aims only to achieve the objective of his action.

Research on knowledge transfer included as influence factors culture (Herghiligiu et al., 2013), trust, technology/ infrastructure, personal values, rewards, organizational structure (Chen & Huang, 2007), management support and networking.

While defining the knowledge transfer authors as Harder (2008) introduced knowledge transfer behavior as being voluntarily. This means that knowledge transfer is not a behavior that can be forced to occur. Therefore, employees must be willing to accomplish the knowledge transfer. Despite the fact that researchers highlight the importance and role of motivation in knowledge transfer, some researchers such as Li and Poon (2009) introduced the motivational factors of knowledge transfer to emphasize what are the most important motivational factors of knowledge transfer behavior. Some of the researchers mentioned above have studied the influence of motivational factors on knowledge sharing in terms of functional form (Harder, 2008), while others have used different theories of knowledge transfer and made an evaluation using data from a particular real context (Pohontu, 2013).

According to literature there are a lot of empirical studies that present an approach to factors that have influence on knowledge sharing. Yet these factors are divergent and their relationships to the knowledge sharing behavior are different in some cases. In addition, the theories used to make an explication to knowledge sharing are diverse. Taking into consideration this facts an extraction of the most influencing factors on knowledge sharing could be a great challenge. To summarize, the literature presents four general dimensions: cost, extrinsic benefits, intrinsic benefits and contextual factors (Pohontu, 2013).

Organizations vary in all aspects. Thus identifying the most influencing factors of organizational learning is very valuable. Fixing these factors would allow individuals within organizations to benefit from some aspect that would encourage a context for organizational learning. Besides the previously mentioned influence factors, others influencer's involved in co-opetition was added in order to be presented a set of dimensions through which the openness to learning through learning by sharing is evaluated (Pohontu, 2013).

4. Methodology

4.1. Purpose and research hypotheses

This study is designed to provide a comprehensive picture on synergistic processes involving the knowledge sharing and learning process, describing the determinants and outcomes involved in these concepts. Given the distinctive characteristics and selection criteria of the two research paradigms widely accepted, namely quantitative and qualitative research, this study adopted quantitative paradigm and used a deductive approach to test the relationships between the variables identified.

The research hypotheses used to examine these relationships will be developed and formulated based on the findings provided by the study of the existing documents, according to the results of the research already carried out (Pohontu, 2013).

The integrated study of the aspects of research nature requires a comprehensive research strategy, given the large number of variables involved, the complexity of each variable, and relatively ambiguous and poorly defined nature of some of the variables involved.

Therefore, strategy and research methodology for the study of these topics is based on a review of the views expressed in the literature and adopt the most appropriate research direction, in agreement with the realities of the investigated area, namely Romanian organizations.

Given the fact that literature review of this study is focused on testing the integrative model for promoting synergetic processes of knowledge sharing in the purpose of innovation, the specific hypotheses of the research will include (Pohontu, 2013):

H₁ - Individual factors form a valid prediction model for learning by sharing behavior.

H₂ - Organizational factors form a valid prediction model for learning by sharing behavior.

H₃ - Individual and organizational benefits form a valid prediction model for learning by sharing behavior.

In the context of this research, after analyzing the patterns of research knowledge sharing found in the literature, we considered introducing the following research general model of learning by sharing (Figure 1).

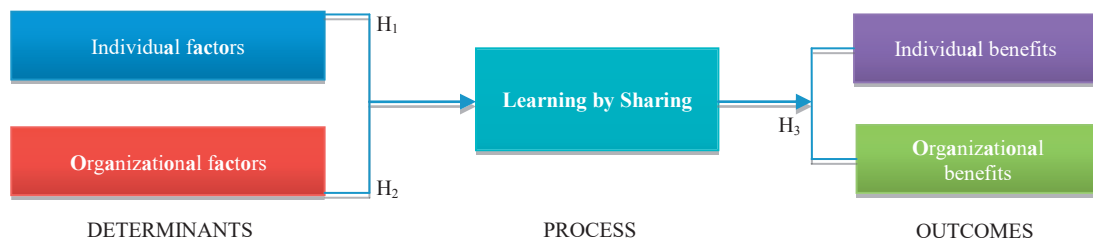


Fig. 1. Framework of the methodology

Considering the systemic model learning by sharing, the following research model is proposed (Figure 1) with the purpose of investigating the relationships between the four differences presented above. After using the approach proposed by Rajagopalan et al. (1993), the analytical framework of this study is threefold: determinants, processes and outcomes. Determinants are those factors that are included in the mechanism meant to promote individual learning and influence the facilitation and knowledge transfer between employees or between groups. Learning by sharing dimension refers to the way in which employees can share their experiences, expertise and contextual information with others. Learning dimension of knowledge transfer is comprised of two sub-dimensions, namely knowledge sharing behavior and learning process behavior. Outcomes dimension shows the extent to which the learning by sharing processes has influences on individual and organizational benefits. In terms of individual benefits, they refer to intangible benefits such as accumulation of new knowledge, improving relationships with colleagues, the satisfaction of helping others and reducing workload and tangible benefits, and the reward system.

As for the organizational benefits, they refer to the orientation of the organization towards innovation and organizational performance (Pohontu, 2013).

4.2. Analyzed sample

Taking into account the intended research purpose, the target population of this research consists of employees from organization located in North-East region of Romania, from private sector, regardless the dimension or field of activity.

4.3. Measuring instrument and description of the involved variables

The development of the questionnaire that investigates general attitudes and perceptions regarding knowledge transfer and organizational learning in Romanian organizations was undertaken by taking into account the purpose and the objectives of the research. Thus, the investigated population was based on a probabilistic sample based on simple random selection. For each considered dimension was constructed or adopted from the literature, a set of representative questions that could show the most important aspects of the dimension. Each dimension was constructed or developed on the basis of previous empirical studies and their items were chosen to achieve the most important aspects of dimension. The development and adaptation of the items takes into account the following rules: questions’ applicability, clarity and accuracy, the ability of the respondents to answer correctly, the simplicity of the used language and avoidance of the double meaning. Therefore the questionnaire includes only closed questions. Regarding formulation of the response options for such questions Likert measurement scale was used (five steps), because it creates premises for a higher response rate on respondents.

5. Research results

5.1. Carrying out the research

The research was based on the population made of organizations located in Northeast region of Romania. The research method was a descriptive explanation based on self-administrated questionnaires distributed by e-mails. The response rate could be observed in Table 1.

Table 1. Response rate.

Questionnaire rate	No.
Questionnaire distributed	5600
Questionnaire returned	295
Questionnaire not returned	5305
Questionnaire returned but not usable	15
Returned questionnaires usable	280
Response rate	5.2%

5.2. Testing the internal consistency

Considering that the questionnaire used in the research represents a tool for psychological assessment, therefore a Cronbach Alpha coefficient analysis is required in order to ensure the consistency. Practically and directly, an instrument is reliable and consistent when composed items are correlated among themselves.

Table 2. Cronbach’s Alpha test.

Cronbach’s Alpha	N of items
.924	280

Taking into account that the value of the coefficient is very close to 1 (0.924 – Table 2), it can be said with certainty that the used research instrument can be considered consistent (Jaba & Grama, 2004), and the analysis procedure could follow.

5.3. Statistical analysis of research variables

5.3.1. Statistical analysis associated to hypothesis no.1

In order to verify which of the five dimensions of individual factors variable can be considered valences predictors for learning by sharing, the hierarchical multiple regression has been used.

The usefulness of regression analysis resides from the fact that a description of the relationship between studied variables could be obtained. Thus, it will be examined if the variation of the variable involves a change in the same direction or in the opposite direction on other variable.

Regression model that will be estimated will be as follows (equation 1):

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \quad (1)$$

where: Y – intensity of learning by sharing behavior, X₁ – knowledge self-efficacy, X₂ – individual competitiveness, X₃ – need for learning, X₄ – trust, X₅ – commitment.

Following the regression analysis, the equation was re-estimated 4 times, by each time a predictor was added. The first estimated model contains only one estimated dimension, namely knowledge self-efficacy as a predictor, then all dimensions were added, individual competitiveness, need for learning, trust and commitment.

According to the results, the last model is significant under F test (5.274) = 38.981, p < 0.01, which indicates that the estimated model can be interpreted. Therefore, R = 0.645, R² = 0.416 and R² adjusted = 0.405. The results indicate that the regression equation explains approximately 40.5% of the variances of learning by sharing, the overall effect being high.

Introducing in the equation of knowledge self-efficacy variable (R² change = 0.234, F change = 84.706, p = 0.00), individual competitiveness variable (R² change = 0.037, F change = 14.043, p = 0.00), need for learning variable (R² change = 0.075, F change = 31.805, p = 0.00), trust variable (R² change = 0.028, F change = 12.246, p = 0.001), commitment variable (R² change = 0.042, F change = 19.637, p = 0.00). It is clear that all factors considered significant improvements regression equation.

Final regression equation analysis confirms what has been suggested, that the dimension of individual factors variable are good predictors of learning by sharing. Therefore the regression equation in raw scores is (equation 2):

$$Y = 44,503 + (-0,788)X_1 + 0,095X_2 + 1,628X_3 + (-0,964)X_4 + 0.768X_5 \quad (2)$$

The regression equation in z scores is (equation 3):

$$Y = -0,247X_1 + 0,026 X_2 + 0,315 X_3 + (-0,362) X_4 + 0,238 X_5 \quad (3)$$

Concluding, after this analysis it can be stated that all of the five component dimensions can predict the learning by sharing behavior. Regression coefficient β_1 is negative, which indicates that between learning by sharing behavior and knowledge self-efficacy there is a reverse link. Considering a constant influence of all other factors, at the variation of 1 unit of knowledge self-efficacy, the intensity of learning by sharing behavior varies in the opposite direction with 0.247 units. Regression coefficient β_2 is positive, which indicates that between learning by sharing behavior and individual competitiveness there is a direct link. Considering a constant influence of all other factors, at the variation of 1 unit of individual competitiveness, the intensity of learning by sharing behavior varies in the same direction with 0.026 units. Regression coefficient β_3 is positive which indicates that between learning by sharing behavior and need for learning there is a direct link. Considering a constant influence of all other factors, at the variation of 1 unit of individual competitiveness, the intensity of learning by sharing behavior varies in the same direction with 0.315 units. Regression coefficient β_4 is negative, which indicates that between learning by sharing behavior and trust there is a reverse link. Considering a constant influence of all other factors, at the variation of 1

unit of trust, the intensity of learning by sharing behavior varies in the opposite direction with 0.362 units. Regression coefficient β_5 is positive which indicates that between learning by sharing behavior and commitment there is a direct link. Considering a constant influence of all other factors, at the variation of 1 unit of commitment, the intensity of learning by sharing behavior varies in the same direction with 0.238 units. Analyzing the overall result it can be stated that hypothesis 1 is partially confirmed, given the fact that learning by sharing variable is predicted in a low measure by individual competitiveness.

In conclusion the statistical analysis indicates that: Intensity of learning by sharing behavior = - knowledge self-efficacy + individual competitiveness + need for learning + need for learning – trust + commitment.

5.3.2. Statistical analysis associated to hypothesis no.2

In order to verify which of the four component dimensions of organizational factors variable can be considered valences predictors for learning by sharing, the hierarchical multiple regression has been used. Regression model that will be estimated will be as follows (equation 4):

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 \quad (4)$$

where: Y – intensity of learning by sharing behavior, X1 – mutual benefit, X2 – organizational competitiveness, X3 – top management support, X4 – practices for promoting knowledge sharing and learning.

Following the regression analysis, the equation was re-estimated 3 times, by each time a predictor was added. The first estimated model contains only one estimated dimension, namely mutual benefit as a predictor, and then all dimensions were added, organizational competitiveness, top management support, practices for promoting knowledge sharing and learning.

According to the results, the last model is significantly under F test $(4,274) = 62,763$, $p < 0.01$, which indicates that the estimated model can be interpreted. Therefore, $R = 0.691$, $R^2 = 0.478$ and R^2 adjusted = 0.471. The results indicate that the regression equation explains approximately 47.1% of the variances of learning by sharing, the overall effect being high.

Introducing in the equation of knowledge mutual benefit variable (R^2 change = 0.193, F change = 66.763, $p = 0.00$), organizational competitiveness variable (R^2 change = 0.039, F change = 14.043, $p = 0.00$), top management support variable (R^2 change = 0.211, F change = 104.351, $p = 0.00$), practices for promoting knowledge sharing and learning variable (R^2 change = 0.035, F change = 18.234, $p = 0.00$). It is clear that all factors considered significant improvements regression equation.

Final regression equation analysis confirms what has been suggested, that the all dimensions of organizational factors variable are good predictors of learning by sharing. Therefore the regression equation in raw scores is (equation 5):

$$Y = 42,249 + (-0,665)X_1 + 0,214X_2 + 0,573X_3 + 0,687X_4 \quad (5)$$

The regression equation in z scores is (equation 6):

$$Y = -0,396X_1 + 0,063X_2 + 0,303X_3 + 0,261X_4 \quad (6)$$

Concluding, after this analysis it can be stated that all of the five component dimensions can predict the learning by sharing behavior. Regression coefficient β_1 is negative, which indicates that between learning by sharing behavior and mutual benefits there is a reverse link. Considering a constant influence of all other factors, at the variation of 1 unit of mutual benefits, the intensity of learning by sharing behavior varies in the opposite direction with 0.396 units. Regression coefficient β_2 is positive, which indicates that between learning by sharing behavior and organizational competitiveness there is a direct link. Considering a constant influence of all other factors, at the variation of 1 unit of organizational competitiveness, the intensity of learning by sharing behavior varies in the same direction with 0.063 units. Regression coefficient β_3 is positive, which indicates that between learning by sharing behavior and top management support there is a direct link. Considering a constant influence of all other factors, at

the variation of 1 unit of top management support, the intensity of learning by sharing behavior varies in the same direction with 0.303 units. Regression coefficient β_4 is positive, which indicates that between learning by sharing behavior and practices for promoting knowledge sharing and learning there is a direct link. Considering a constant influence of all others factors, at the variation of 1 unit of practices for promoting knowledge sharing and learning, the intensity of learning by sharing behavior varies in the same direction with 0.216 units. Analyzing the overall result it can be stated that hypothesis 2 is partially confirmed, given the fact that learning by sharing variable is predicted in a low measure by organizational competitiveness.

In conclusion the statistical analysis indicates that: Intensity of learning by sharing behavior = - mutual benefits + organizational competitiveness + top management support + practices for promoting knowledge sharing and learning.

5.3.3. Statistical analysis associated to hypothesis no.3

In order verify which of the five component dimensions of individual and organizational benefits variables can be considered valences predictors for learning by sharing, the hierarchical multiple regression has been used. Regression model that will be estimated will be as follows (equation 7):

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 \quad (7)$$

where: Y – intensity of learning by sharing behavior, X1 – enjoyment in helping others, X2 – employee expectations, X3 – rewards system, X4 – propensity to innovate, X5 – organizational performance.

Following the regression analysis, the equation was re-estimated 4 times, by each time a predictor was added. The first estimated model contains only one estimated dimension, namely enjoyment in helping others as a predictor, and then all dimensions were added, employee expectations, rewards system, propensity to innovate and organizational performance. According to the results, the last model is significantly under F test $(5,274) = 13.234$, $p < 0.01$, which indicates that the estimated model can be interpreted. Therefore, $R = 0.441$, $R^2 = 0.195$ and R^2 adjusted = 0.180. The results indicate that the regression equation explains approximately 18% of the variances of learning by sharing, the overall effect being high. Introducing in the equation of enjoyment in helping others variable (R^2 change = 0.096, F change = 29.661, $p = 0.00$), employee expectations variable (R^2 change = 0.034, F change = 10.831, $p = 0.00$), rewards system variable (R^2 change = 0.2, F change = 6.511, $p = 0.011$), propensity to innovate (R^2 change = 0.028, F change = 5.597, $p = 0.019$), and organizational performance. It is clear that all factors considered significant improvements regression equation.

Final regression equation analysis confirms what has been suggested, that the all dimensions of individual and organizational benefits variable are good predictors of learning by sharing. Therefore the regression equation in raw scores is (equation 8):

$$Y = 19,149 + 0,598X_1 + 0,292X_2 + 0,078X_3 + 0,114X_4 + 0,610X_5 \quad (8)$$

The regression equation in z scores is (equation 9):

$$Y = 0,138X_1 + 0,161X_2 + 0,036X_3 + 0,048X_4 + 0,211X_5 \quad (9)$$

Concluding, after this analysis it can be stated that all of the five component dimensions can predict the learning by sharing behavior. Regression coefficient β_1 is positive, which indicates that between learning by sharing behavior and enjoyment in helping others there is a direct link. Considering a constant influence of all others factors, at the variation of 1 unit of enjoyment in helping others, the intensity of learning by sharing behavior varies in the same direction with 0.138 units. Regression coefficient β_2 is positive, which indicates that between learning by sharing behavior and employee expectations there is a direct link. Considering a constant influence of all others factors, at the variation of 1 unit of employee expectations, the intensity of learning by sharing behavior varies in the same direction with 0.161 units. Regression coefficient β_3 is positive, which indicates that between learning by sharing behavior and rewards system there is a direct link. Considering a constant influence of all others factors, at the variation of 1 unit of rewards system, the intensity of learning by sharing behavior varies in the same direction

with 0.036 units. Regression coefficient β_4 is positive, which indicates that between learning by sharing behavior and propensity to innovate there is a direct link. Considering a constant influence of all others factors, at the variation of 1 unit of propensity to innovate, the intensity of learning by sharing behavior varies in the same direction with 0.048 units. Regression coefficient β_5 is positive, which indicates that between learning by sharing behavior and organizational performance there is a direct link. Considering a constant influence of all others factors, at the variation of 1 unit of organizational performance, the intensity of learning by sharing behavior varies in the same direction with 0.211 units. Analyzing the overall result it can be stated that hypothesis 3 is partially confirmed, given the fact that learning by sharing variable is predicted in a low measure by rewards system and propensity to innovate.

In conclusion the statistical analysis indicates that: Intensity of learning by sharing behavior = enjoyment in helping others + employee expectations + rewards system + organizational performance.

Synthesising the statistical analysis associated on testing the integrative model for promoting synergetic processes of knowledge sharing in the purpose of innovation, it could be observed in the Table 3, the status of the research proposed specific hypotheses.

Table 3. Status of the research proposed specific hypotheses.

Research proposed hypotheses	Result of the overall analysis
H ₁ - Individual factors form a valid prediction model for learning by sharing behavior	hypothesis 1 is partially confirmed, given the fact that learning by sharing variable is predicted in a low measure by individual competitiveness
H ₂ - Organizational factors form a valid prediction model for learning by sharing behavior	hypothesis 2 is partially confirmed, given the fact that learning by sharing variable is predicted in a low measure by organizational competitiveness
H ₃ - Individual and organizational benefits form a valid prediction model for learning by sharing behavior	hypothesis 3 is partially confirmed, given the fact that learning by sharing variable is predicted in a low measure by rewards system and propensity to innovate

6. Conclusions

In current economy, organizations live together and undergo a double mutation: everything is marketed and capitalized, and knowledge and innovation have become increasingly important in the competitive world.

In terms of learning through knowledge transfer benefits, both categories of benefits recorded a positive influence on the learning process of knowledge transfer. These results are similar to those found in the study records. Thus, the satisfaction to help others dimension is the main reason for which the individuals are predisposed to learning by sharing, this variable recorded the highest score in terms of individual benefits (0,248). In contrast, the reward system achieved the lowest value of the correlation coefficient (0,216). This result is confirmed by previous studies highlighting that the reward system is not a very influential factor of knowledge sharing.

In terms of organizational benefits, organizational performance dimension recorded the highest value of the correlation coefficient (0,330). However, between the organizational benefits of the two component variables there are no important differences. Also it is important for employees not to be afraid that their under development careers may face danger if the knowledge sharing may lead to mistakes and failure. In terms of individual benefits two important aspects are the psychological contract and positive psychology.

Given the uncertainty and increasing complexity of current and future market situation, organizational learning alongside processes based on knowledge sharing provides the best capability for an organization to cope with change and adapt in correspondence in the context of such an extent that the performance increases over time. By combining the power of organizational learning and knowledge sharing, organizations can create procedures, cultures and structures that allow scanning, evaluating, anticipating and concrete action on unexpected threats or possible opportunities.

This research contributes to the debate between knowledge management and organizational learning by providing an empirical analysis based on investigation of influence factors and outcomes of the process of organizational

learning and knowledge sharing seen as a unitary process, thus reducing the gap between two streams of knowledge management and organizational learning literature using a sample of employees from private sector from North-East region of Romania. Practical implication of this study is to promote the understanding of how organizational knowledge-based resources can be grown and used by promoting of strategies based on knowledge management and organizational learning initiatives.

Overall, research findings highlight several implications in practical terms that can be considered by managers in order to promote learning – based culture through knowledge transfer. First, it is confirmed that some individual factors may have a high influence on learning through transfer. Thus, managers should promote a social networking – based culture, because this is the preliminary stage for the knowledge transfer to occur. Secondly, they should not focus on a rewards system, but more on promoting a positive attitude regarding the satisfaction of helping others through knowledge transfer. Such strategies could have a long – term and not a short – term effect. On the other hand, managers can observe that learning through knowledge transfer has a high influence on innovation and organizational performance, this result is further evidence when deciding a long – term oriented strategy.

References

- Argote, L. (1999). *Organizational Learning. Creating, Retaining and Transferring Knowledge*, Kluwer Academic Pub., Boston.
- Bierly, P., Chakrabarti, A. (1996). Generic knowledge strategies in the US pharmaceutical industry. *Strategic Management Journal*, 17, 123-135.
- Chen, I.Y.L. (2007). The factors influencing members' continuance intentions in professional virtual communities — A longitudinal study. *Journal of Information Science*, 33 (4), 451-467.
- Deci, E.L., Ryan, R. M. (2000). The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior, *Psychological Inquiry*, 11, 227-268.
- Herghiligiu, I.V., Lupu, M.L., Robledo, C., Kobi, A., (2013). Conceptual research model of factors that influence environmental knowledge management at organizational level, *Applied Mechanics and Materials*, 371, 893-897.
- Harder, M. (2008). How Do Rewards and Management Styles Influence the Motivation to Share Knowledge?, In: SMG Working Paper No. 6/2008.
- Istrate, C., Herghiligiu, I.V. (2016). Knowledge management performance methodology regarding manufacturing organizations, ModTech International Conference - Modern Technologies in Industrial Engineering IV, IOP Publishing, IOP Conf. Series: Materials Science and Engineering, 145, Organization and Management of Industrial Processes, 062002 doi:10.1088/1757-899X/145/6/062002.
- Jaba, E., Grama A. (2004). *Statistical analysis with SPSS under Windows* (in Romanian), Polirom Publishing House, Iași, Romania.
- Luca, A., Lupu, L.M., Herghiligiu, I.V. (2016). Organizational knowledge acquisition - strategic objective of organization, CBU International Conference: Innovations in Science and Education, 23-25 March 2016, Central Bohemia University, Prague, Czech Republic, UE, 4, 128-133.
- Li, R.Y.M., Poon S. W. (2009). Future motivation in construction safety knowledge sharing by means of information technology in Hong Kong, *Journal of Applied Economic Sciences*, 4 (3), 457-472.
- Locke, E., Latham, G. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705–717.
- Pohontu, A.I. (2013). Promoting of synergistic processes for knowledge sharing within organizations, PhD Thesis, “Gheorghe Asachi” Technical University of Iasi, Romania/ University of Angers, France.
- Rajagopalan, N., Rasheed, A.M.A., Datta, D.K. (1993). Strategic decision processes: critical review and future directions, *Journal of Management*, 19 (2), 349-84.
- Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization* New York: Currency: Doubleday. *Organizational Learning* 25.
- Stacey, R.D. (2003). Learning as an Activity of Interdependent People, *The Learning Organization* 10 (6), 325-331.
- Spender, J.C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*, 17, 45-62.
- Wiig, K. (1997). Integrating intellectual capital and knowledge management. *Long Range Planning*, 30 (3), 399-405.
- Zack, M. (1999). Developing a knowledge strategy. *California Management Review*, 41 (3), 125-145.