How does the Relationship Between the Mistakes Acceptance Component of Learning Culture and Tacit Knowledge-Sharing Drive Organizational Agility? Risk as a Moderator

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Abstract: Changes in the business context create the need to adjust organizational knowledge to new contexts to enable the organizational agile responses to secure competitiveness. Tacit knowledge is strongly contextual. This study is based on the assumption that business context determines tacit knowledge creation and acquisition, and thanks to this, the tacit knowledge-sharing processes support agility. Therefore, this study aims to expose that there is a strong link between the tacit knowledge flow across the organization and its ability to respond agilely (timely, accurately, and creatively) to contextual changes. Based on the sample composed of 640 Polish knowledge workers and data analyzed with the structural equation modeling method (SEM), this study delivers empirical evidence that tacit knowledge flow is vital for organizational agility. The obtained results confirmed that tacit knowledge sharing mediates between the mistakes acceptance component of learning culture and agility. It means agility, understood as the ability to respond agilely to contextual changes, requires being charged by new, contextual, tacit knowledge obtained thanks to trial-error actions (learning by doing) achievable thanks to breaking conventions and experimentation. Moreover, risk management skills have been proven to be one of the critical characteristics of agile organizations today.

Keywords: Mistakes Acceptance, Learning Culture, Tacit Knowledge Sharing, Organizational Agility, Risk Management

1. Introduction

Although there is no single definition of agility that is universally followed, all definitions commonly share the basic concepts of speed and flexibility for responding to changes in dynamic market environments (Kettunen and Laanti, 2008). It is because agility secures competitiveness (Zastempowski and Cyfert, 2023). In a Finnish survey study of agility in organizations, the most common aims why organizations wanted to become more agile included: productivity and quality, responsiveness to customer/market changes, job satisfaction, fast/continuous learning in rapidly changing operating environments, and competitive and desirable products (Kettunen et al., 2019). So, agile response to the market requires constant acquisition of up-to-date, relevant knowledge about the market and the entire business context to secure business continuity. Since learning culture supports tacit knowledge awareness and sharing and next change adaptability (Kucharska and Rebelo, 2022), then this relation matters also for agility building. This is because change adaptability and agility are related (Park and Park, 2021).

Therefore, this study explores the link between tacit knowledge and organizational agility. It specifically seeks the answer to the question: *Does the relationship between the mistakes acceptance component of learning culture and tacit knowledge-sharing drive organizational agility?*

1.1 Research Gap

This study is framed by Organizational Knowledge Creation Theory, understood as a continuous process of tacit knowledge acquisition and its transformation into explicit form thanks to social interactions (Nonaka and Takeuchi, 1995). Tacit knowledge in contrast to explicit is enormously personal. Tacit knowledge is difficult to express directly in words, and often the only ways of presenting it are through drawings, metaphors, analogies, and different methods of expression that do not require a formal use of language (Koskinen et al., 2003). Thanks to experimentation and learning through interactions and collaborations, its acquisition enables its awareness and, as a result, also sharing, which in more and more remote-work-dominated business environments is often supported by technology and IT competency of the workforce (Kucharska and Erickson, 2023a-b). Technology then forces agility (Lu, and Ramamurthy, 2011; Orłowski et al., 2017) and facilitates agility. Moreover, agility is developed thanks to learning (Dries et al., 2012). Experimentation, that supports trial-error learning (Ambituuni et al., 2021). Trial-error learning (Hull, 1930; Young, 2009) enables individuals and organizational ability to respond

timely and accurately, and to creatively adapt to changes. Learning culture development is then required to support agility implementation in organizations. Kucharska and Bedford (2020) proved that organizational learning culture is composed of two dimensions: the motivational climate factor and the factor of acceptance of mistakes as a potential source of learning. Moreover, Kucharska (2021a-b) also proved that the mistakes acceptance component of learning culture supports tacit knowledge sharing. Therefore, this study aims to explore whether there is a strong link between the tacit knowledge flow across the organization and its ability to respond agilely (timely, accurately, and creatively) to contextual changes driven by the mistakes acceptance component of a learning culture. Moreover, this study aims to explore how a positive risk-taking attitude is related to organizational agility. Such formulated study aims are important because tacit knowledge's impact on agility has not yet been considered a significant force supporting agility. Altarawneh and Al-Adaileh (2023) proved that agility mediates between knowledge management and organizational transformation ability, but their study generally concerned knowledge management without analyzing in detail how tacit and explicit knowledge supports these processes. Kucharska and Bedford (2020) and Kucharska and Rebelo (2022a) proved that, indeed, the mistakes acceptance component of learning culture supports tacit knowledge sharing and next adaptability, but the risk-taking attitude as related to organizational agility has not been examined in this context yet. So, examining these relations matters to understand better factors influencing the successful agility implementation in knowledge-driven organizations. This study aims to do so.

2. Theoretical Framework

The mistakes acceptance component of learning culture is defined as the organizational acceptance of the case that somebody can be wrong, and reflects the readiness to correct the way of action (Kucharska and Bedford, 2020). This acceptance component opens employees to critical thinking about their own actions without "blame and shame" but with motivation to gain new knowledge sharing instead of hiding (Kucharska and Rebelo, 2022b) and with motivation to make positive change. Maes and Van Hootegem's (2019) model of organizational change assumes that the reflection from a mistake (understood as input to the organizational system) can trigger change. Moreover, Kucharska and Kucharski (2023) exposed that the mistakes acceptance component of learning culture supports change adaptability of employees characterized by technological and non-technological mindsets. Based on this, the hypothesis was developed as below:

H1: Mistake acceptance component of learning culture impact positively on organizational agility

Based on studies of Love et al. (2013, 2016, 2018) or Gelfand et al. (2011), we can assume that learning culture can transform erroneous events into experiences, leading to tacit knowledge creation. Moreover, Kucharska and Bedford (2020) and Kucharska and Rebelo (2022a) proved that, indeed, the mistakes acceptance component of learning culture supports tacit knowledge sharing and organizational adaptability to changes. Based on this, the hypothesis was developed as below:

H2: Mistake acceptance component of learning culture impact positively on tacit knowledge sharing

The tacit knowledge creation and alignment processes are vital for the successful response to uncertainty and must be facilitated by the company culture to support organizational learning. Organizational tacit knowledge creation is an effect of sharing knowledge across departments and teams (social interactions) but also through experimentation and simulation - learning by doing (Kucharska and Erickson, 2023a-b). Al-Omoush et al. (2020), Baran and Woznyj (2020), Cegarra-Navarro and Martelo-Landroguez (2020), and Cegarra-Navarro et al. (2016), Pitafi et al. (2023) claimed that efficient knowledge management matters for successfully implementing agility. Tacit knowledge sharing is one of the key processes that knowledge management focuses on. So, based on this, the hypothesis was proposed as below:

H3: Tacit knowledge sharing impact positively on organizational agility

<u>Control variable</u> – A control variable (CV) represents an additional factor (third variable) that may influence the relationship between an independent and dependent variable in the model tested. A CV may act as a confound, a moderator, or a suppressor (Spector and Brannick, 2011). The CV's imputation methodology enables extraneous variables to be included in a model–control variables are not the focal point of the study yet remain theoretically important (Becker et al., 2016). For this study, such a theoretically important variable is risk-taking attitude. A risk-taking attitude is needed to cross boundaries and comfort zones, which matters for new learning. "(...) learning as one of the organization's core values, a focus on people, concern for all stakeholders, stimulation of experimentation, encouraging an attitude of responsible risk, readiness to recognize errors and learn from them, and promotion of open and intense communication, as well as the promotion of cooperation,

interdependence, and share of knowledge" (Rebelo and Gomes, 2011, p.174). Moreover, works by Funston and Wagner (2010), Galli and Lopez (2018), Moran and Moran (2014), and Rael (2017) enable us to expect that risk management is significantly tied to organizational agility competency building. Based on all the above, we see a risk-taking attitude as a factor that can affect the relation between the mistakes acceptance component of learning culture and tacit knowledge sharing on organizational agility. Therefore, the hypothesis was formulated as below:

*H*_{cv}1: Risk-taking attitude affects organizational agility

<u>Mediation</u> – An intermediate variable that brings a deeper understanding of the relation between two variables is considered to be a mediator. For this research, tacit knowledge sharing is considered to be a mediating variable between the mistakes acceptance component of learning culture and agility, assumed as influenced by this component. Figure 1 visualizes the theoretical framework elaborated above.



Figure 1: Theoretical model

3. Methodology

<u>Sampling procedure</u>: this study targeted Polish knowledge workers; therefore, qualified respondents declared that their work's first input and output is knowledge. Moreover, to secure the respondents' familiarity with their organizations' issues, we qualified only those who worked a minimum of one year for their current employer. Data were collected in March 2023 by applying the CAWI method.

<u>Sample characteristics</u>: The sample is composed of 640 Polish knowledge workers: 306 specialists and 334 managers; 329 women and 311 men representing mostly private (77%) companies from different sectors to illustrate the general view on Poland (dominating sectors: production and knowledge services 19% each). <u>Measures</u>: respondents referred to most questions using a 7-point Likert scale. Control variables were inputted as composites. Table 1 presents measured constructs scales and their sources. Obtained reliabilities are given in Table 2.

| People know that mistakes are a learning consequence and tolerate it up to a certain limit. Most people freely declare mistakes. We discuss problems openly without blaming others. Mistakes are tolerated and treated as learning opportunities. |
|--|
| I share knowledge learned from my own experience. |
| I have the opportunity to learn from the experiences of others. Colleagues share new ideas with me. Colleagues include me in discussions about the best practices. |
| We are flexible to changes. |
| We can adjust ourselves to changes. We adapt to changes easily. We used changes. |
| I have a risk-taking attitude. |
| My boss exposes a risk-taking attitude. My workmates have a risk-taking attitude. |
| |

Table 1: Scales and their sources

Method of analysis: structural equation modeling (SEM) using SPSS Amos 26 software (Byrne, 2016).

Sample quality: Kaiser–Meyer–Olkin (KMO) test: .909, the total variance extracted: 70%, and Common method bias: 46% justify the acceptable quality of the sample.

| | Mean | SD | AVE | CR | Cronbach alpha | _{cv} R | TKS | LCm | Α |
|-----|------|------|------|------|----------------|-----------------|-------|-------|-------|
| cv₽ | - | - | - | - | - | | | | |
| LCm | 3.16 | 1.80 | 0,81 | 0,93 | .93 | -0,063 | 0,902 | | |
| TKS | 3.62 | 1.20 | 0,50 | 0,86 | .86 | -0,032 | 0,503 | 0,927 | |
| Α | 3.64 | 1.15 | 0,59 | 0,85 | .85 | -0,124 | 0,6 | 0,779 | 0,922 |

Table 2: Basic statistics obtained AVE root square and correlations between constructs

Note: n=640, TKS-Tacit knowledge sharing, LCm-Learning culture mistakes acceptance component, Aorganizational agility; control variable: _{cv}R– Risk-taking attitude; squared root of AVE is bolded, ML- maximum likelihood

4. Results

Control variables imputation requires first running and comparing empirical models with and without control variables (CV), and if the model with CVs is better fitted to the data, then the CVs imputation is justified, and the model results can be analyzed (Becker et al., 2016). The results (Table 3) showed that the model with CVs fits the data better (Model A) than the model without them (Model B). So, this paper further discusses and analyzes the Model A with CVs.

| Model A | with CV | s; RMSE | A=.058(.0 | 046069) | Model B without CVs; RMSEA=.065(.052078) | | | | | |
|-------------------------|------------------------------|--|--------------|----------------------------|--|--------------|----------|--------------|----------------------------|--|
| χ2=125.13(4 | 80 TLI=.972 | χ2=117.84(32) Cmin/df=3.68 CFI=.979 TLI=.971 | | | | | | | | |
| Hypothesis Significance | | | Verification | | Hypothesis | Significance | | Verification | | |
| H1 | H1 .27*** | | | sustained | H1 | .28*** | | sustained | | |
| H2 | .5 | 0*** | sustained | | H2 | .50*** | | sustained | | |
| H3 | .6 | 4*** | sustained | | H3 | .64*** | | sustained | | |
| H _{cv} 1 | _{cv} 109** rejected | | rejected | | | | | | | |
| Mediation | direct | indirect | total | Mediation type | Mediation | direct | indirect | total | Mediation type | |
| LCm->TKS- >A | .27*** | .32*** | .59*** | complementary mediation | LCm->TKS- >A | .28*** | .32*** | .60*** | complementary mediation | |

Table 3: Hypotheses verification

Note: n=640, ML- maximum likelihood; p<.05 **p<.01 ***p<.001 ns-not significant result

Generally, all hypotheses except the $H_{cv}1$ were sustained (Table 3; Figure 2). $H_{cv}1$ assumed the positive impact of the risk-taking attitude on organizational agility. Surprisingly, this impact is observed as negative (β =-.09**). This means that the stronger the positive attitude toward risk for employees, the less successful the organizational agility achievement. Moreover, regarding the expected tacit knowledge-sharing moderation between the mistakes acceptance component of learning culture and agility, this relation is confirmed as complementary mediation (Table 3).

The entire model R^2 =.67 enables us to summarize other factors that are not included in this model (33%), which must be considered to fully understand the influence of the mistakes acceptance component of learning culture on organizational agility, which requires further studies. Figure 2 below visualizes the obtained effects.



Figure 2: Empirical model

Note: n=640, ML- maximum likelihood; χ2=125.13(40) Cmin/df=3.12 CFI=.980 TLI=.972 RMSEA=.058(.046-.069); p<.05 **p<.01 ***p<.001 ns-not significant result

5. Discussion

The obtained results confirmed that the tacit knowledge sharing mediates between the mistakes acceptance component of learning culture and agility. It means that agility, understood as the ability to respond agilely (timely, accurately, and creatively) to contextual changes, requires being charged by new, contextual, tacit knowledge obtained thanks to trial-error actions (learning by doing) achievable thanks to breaking conventions and experimentation. This revelation expands earlier suggestions by Ambituuni et al. (2021) and Kucharska and Erickson (2023a) that a risk-taking attitude is necessary to break conventions, experiment, learn new things, and share newly gained (not verified yet) tacit knowledge. Also, Denning (2016, 2018) identified next to such vital agile CEO qualities as a customer-first mindset, a company vision for the future, and the ability to continuously create new business models that match employees' skills and create multiple paths to the same aim (scenarios creation), also the readiness to take risks and acquire new institutional skills to develop new paths – as a base for leaders agility, vital for organizational agility.

This study revealed that a positive attitude toward risk blocks agility. And it is the most surprising finding of this research. Instead of the positive influence of the risk-taking attitude of organization members on organizational agility, the negative effect was noted (Hcv1=-.09**). However, this result sheds light on Zanjirchi et al.'s (2017) study, which claimed that supply chain risk factors could be considered drivers of organizational agility. This is because agility, understood as smooth adaptability, is often seen as the effect of efficient risk management. It is because risk is a constant factor in a dynamic business environment. So, on the one hand, the positive attitude towards risk-taking facilitates tacit knowledge sharing (Kucharska 2021a), but at the same time, only efficient risk management leads to organizational agility seen as a smooth collective action toward changing market needs adaptability – as our study results suggest.

Taking a particular innovative action is risky, and non-taking it is risky as well. So, the essence is to select the risk that an organization can afford in the particular business context. Thanks to efficient risk management, the negative impact of inaction can often be seen as higher than the risks of very innovative actions taken, or in other words, very innovative actions are worth risk-taking to avoid risks caused if these innovative actions remain untaken. Summing up, the essence of agility can be, in the light of the given results, seen as the ability to smoothly select the acceptable risk, as suggested by Kucharska et al. (2024). Therefore, risk management skills should be included in the list of key characteristics of agile leaders and agile organizations today.

Moreover, this study targeted Polish knowledge workers. It is because the majority of previous studies concerning learning culture components, precisely the mistakes acceptance component as a source of learning, influence tacit knowledge sharing and change adaptability (Kucharska and Bedford, 2020, 2023; Kucharska and Rebelo, 2022; Kucharska 2021a,b) based on Poland. So, this study gave us a picture of risk-taking attitudes and organizational agility in the same national context previously studied. Thanks to this, we can recognize the difference between the risk-taking attitude meaning, for the tacit knowledge sharing and, the risk-taking attitude meaning, for the agility building. However, the more interesting the findings are, the more critical further studies will be based on countries other than Poland. Such studies are needed to understand the risk-management phenomena for agility in more in-depth. Precisely, for tacit knowledge sharing, the positive attitude of risk-taking is beneficial, whereas for agility building – the opposite – a negative attitude works better.

6. Practical Implications

From the practical perspective, the given results enhance the implementation of a learning culture in knowledgedriven organizations with special attention to the mistake acceptance component. This component is vital for the development of a positive attitude towards the fact that somebody can be wrong and, thanks to this, reflects on one's own actions. Such reflection leads to revealing the contextual tacit knowledge that can be shared among workmates. So, such a shared positive attitude towards the fact that people can be wrong also brings the shared readiness to correct wrong ways of action at work without "blame and shame." The reflection from a mistake can act as a trigger to positive change, enabling better adaptability and competitiveness. Without it, in light of the given results, agility achievement seems to be impossible. The second, very important practical implication concerns risk management. As our study results suggest, only efficient risk management leads to organizational agility, which is seen as a smooth collective action toward changing market needs and adaptability. Therefore, risk management skills should be included in the list of key characteristics of agile leaders and agile organizations today.

7. Limitation and Further Research

The key limitation of this research is that it is based on data collected in only one country. The other critical limitation of this research is that the organizational adaptability scale was adapted here as a proxy for organizational agility. Precisely, the adapted scale omits the factor of organizational ability to respond timely, accurately, and creatively to changes. So, further studies with developed scales for organizational agility are needed to confirm the given findings and conclusions. Furthermore, the analyzed model (Figure 2) explains the phenomenon studied in 67%, while the other 33% remains unrevealed. This means that other factors influencing the relationship between the mistakes acceptance component of learning culture and organizational agility are omitted in the analyzed model and should be identified and studied in more depth in further studies.

8. Conclusion

Answering the question: *Does the relationship between the mistakes acceptance component of learning culture and tacit knowledge-sharing drive organizational agility?* The answer is yes, it does. The results confirmed that the acceptance component of learning culture supports tacit knowledge sharing that fosters agility. Precisely, tacit knowledge sharing mediates between the mistakes acceptance component of learning culture and agility. It means that agility, understood as the ability to respond agilely (timely, accurately, and creatively) to contextual changes, requires being charged by new, contextual, tacit knowledge obtained thanks to trial-error actions (learning by doing) achievable thanks to breaking conventions and experimentation.

Moreover, risk management skills have been proven to be one of the critical characteristics of agile organizations today.

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References

- Al-Omoush, K.S., Simon-Moya, V. and Sendra-Garcia, J. (2020), "The impact of social capital and collaborative knowledge creation on e-business proactiveness and organisational agility in responding to the COVID-19 crisis", *Journal of Innovation and Knowledge*, Vol.5 No.4, pp. 279-288.
- Altarawneh, S.J. and Al-Adaileh, R. (2023), "Can knowledge management processes support business transformation? The mediating role of business agility", *Global Knowledge, Memory and Communication*, Vol.72 No. 8/9, pp. 864-881. https://doi.org/10.1108/GKMC-01-2022-0004
- Ambituuni, A., Azizsafaei, F. and Keegan, A. (2021), "HRM operational models and practices to enable strategic agility in PBOs: Managing paradoxical tensions", *Journal of Business Research*, Vol.133, pp. 170-182. https://dx.doi.org/10.1016/j.jbusres.2021.04.048
- Baran, B.E. and Woznyj, H.M. (2020). Managing VUCA: The human dynamics of agility. *Organizational Dynamics*, S. pp. 100787. https://dx.doi.org/10.1016/j.orgdyn.2020.100787.

Becker, T.E., G. Atnic, J.A. Breaugh, K.D. Carlson, J.R. Edwards and Spector, P.E. (2016), "Statistical control in correlational studies: 10 essential recommendations for organizational researchers," *Journal of Organizational Behavior*, Vol.37, pp. 157–167.

Cegarra-Navarro, J.-G., Soto-Acosta, P. and Wensley, A.K.P. (2016), "Structured knowledge processes and firm performance: The role of organizational agility," *Journal of Business Research*, Vol.69, pp. 1544–1549. https://doi.org/10.1016/j.jbusres.2015.10.014

Cegarra-Navarro, J.-G. and Martelo-Landroguez, S. (2020), "The effect of organizational memory on organizational agility: Testing the role of counter-knowledge and knowledge application", *Journal of Intellectual Capital*, Vol.21 No.3, pp. 459-479. https://doi.org/10.1108/JIC-03-2019-0048

Denning, S. (2016), Agile's Ten İmplementation Challenges, Strategy & Leadership, Vol.44 No.5, pp. 15-20.

Denning, S. (2018), "The role of the C-suite in Agile transformation: the case of Amazon", *Strategy & Leadership*, Vol.46 No.6, pp. 14-21. https://doi.org/10.1108/SL-10-2018-0094

Dries, N., Vantilborgh, T. and Pepermans, R. (2012), "The role of learning agility and career variety in the identification and development of high potential employees", *Personnel Review*, Vol.41 No.3, pp. 340-358. https://doi.org/10.1108/00483481211212977

Funston, F. and Wagner, S. (2010), Surviving and thriving in uncertainty: Creating the risk intelligent enterprise. John Wiley & Sons.

Galli, B.J. and Lopez, P.A.H. (2018), Risks management in agile new product development project environments: A review of literature. *International Journal of Risk and Contingency Management* (IJRCM), Vol.7 No.4, pp. 37-67.

Gelfand, M. J., Frese, M. and Salmon, E. (2011), *Cultural influences on errors: Planning, detection, and management*. In M. Frese and D. Hoffman (Eds), Errors in organizations (SIOP Organizational Frontier Series, pp.273–315, London, UK: Taylor and Francis.

Hull, C.L. (1930), "Simple trial and error learning: A study in psychological theory", *Psychological Review*, Vol.37, pp. 241–56.

 Kettunen, P., Laanti, M., Fagerholm, F. and Mikkonen, T. (2019). Agile in the Era of Digitalization: A Finnish Survey Study. In: Franch, X., Männistö, T., Martínez-Fernández, S. (eds) Product-Focused Software Process Improvement. PROFES 2019. Lecture Notes in Computer Science, vol. 11915. Springer, Cham. https://doi.org/10.1007/978-3-030-35333-9_28

Kettunen, P. and Laanti, M. (2008). Combining agile software projects and large-scale organizational agility. Software Process: Improvement and Practice, Vol.13 No.2, pp.183-193. https://doi.org/10.1002/spip.354

Koskinen, K. U., Pihlanto, P. and Vanharanta, H. (2003). Tacit knowledge acquisition and sharing in a project work context. International journal of project management, Vol.21 No.4, pp. 281-290. https://doi.org/10.1016/S0263-7863(02)00030-3

Kucharska, W. and Bedford, D.A.D. (2020), "Love your mistakes!—they help you adapt to change. How do knowledge, collaboration and learning cultures foster organizational intelligence?", *Journal of Organizational Change Management*, Vol.33 No.7, pp. 1329-1354. https://doi.org/10.1108/JOCM-02-2020-0052

Kucharska, W. and Bedford, D. (2023), *The Cultures of Knowledge Organizations: Knowledge, Learning, Collaboration (KLC)*, Emerald Publishing Limited, Leeds, pp. i-xviii. https://doi.org/10.1108/978-1-83909-336-420231013

Kucharska, W. and Erickson, G.S. (2023a), "Tacit knowledge acquisition & sharing, and its influence on innovations: A Polish/US cross-country study", *International Journal of Information Management*, Vol.71, 102647. https://doi.org/10.1016/j.ijinfomgt.2023.102647

Kucharska, W. and Erickson, G.S. (2023b), "A multi-industry and cross-country comparison of technology contribution to formal and informal knowledge sharing processes for innovativeness", *Knowledge and Process Management*, Vol.30 No.3, pp. 300-316. https://doi.org/10.1002/kpm.1755

Kucharska, W. and Rebelo, T. (2022a), "Transformational leadership for researcher's innovativeness in the context of tacit knowledge and change adaptability", International Journal of Leadership in Education. https://doi.org/10.1080/ 13603124.2022.2068189

Kucharska, W. and Rebelo, T. (2022b), "Knowledge sharing and knowledge hiding in light of the mistakes acceptance component of learning culture- knowledge culture and human capital implications", *The Learning Organization*, Vol.29 No.6, pp. 635-655. https://doi.org/10.1108/TLO-03-2022-0032

Kucharska, W. (2021a), "Do mistakes acceptance foster innovation? Polish and US cross-country study of tacit knowledge sharing in IT", *Journal of Knowledge Management*, Vol.25 No.11, pp. 105-128. https://doi.org/10.1108/JKM-12-2020-0922

Kucharska, W. (2021b), "Leadership, culture, intellectual capital and knowledge processes for organizational innovativeness across industries: the case of Poland", *Journal of Intellectual Capital*, Vol.22 No.7, pp. 121-141. https://doi.org/10.1108/JIC-02-2021-0047

Kucharska, W. and Bedford, D.A.D. (2020), "Love your mistakes! – They help you adapt to change. How do knowledge, collaboration, and learning cultures foster organizational intelligence?" *Journal of Organizational Change Management*, Vol.33 No.7, pp. 1329–1354. https://doi.org/ 10.1108/JOCM-02-2020-0052.

Kucharska. W. and Kucharski, M. (2023), *Technological vs. Non-Technological Mindsets: Learning From Mistakes, and Organizational Change Adaptability to Remote Work.* Proceedings of the 19th European Conference on Management Leadership and Governance, Vol.19, pp. 205-214. London, UK. Kucharska, W., Kucharski, M. and Balcerowski, T. (2024), The KLC cultures approach for organizational agility. Trust, risktaking attitude, and critical thinking as mediators. Proceedings of the 25th European Conference on Knowledge management, 5-6 September 2024, Veszprém, Hungary.

Love, P.E.D. and Smith, J. (2016), "Toward error management in construction: moving beyond a zero vision", *Journal of Construction Engineering and Management*, Vol.142 No.11, pp.04016058.

Love, P.E.D., Lopez, R. and Edwards, D.J. (2013), "Reviewing the past learn in the failure: making sense of design errors and failures in construction", *Structure and Infrastructure Engineering*, Vol.9 No.7, pp.675-688.

Love, P.E.D., Smith, J. and Teo, P. (2018), "Putting into practice error management theory: unlearning and learning to manage action errors in construction", *Applied Ergonomics*, Vol.69, pp.104-111.

Lu, Y. and Ramamurthy, K. (2011), Understanding the link between information technology capability and organizational agility: An empirical examination. *MIS Quarterly*, Vol.35 No.4, pp. 931–954.

Maes, G. and Van Hootegem, G. (2019), "A systems model of organizational change", *Journal of Organizational Change Management*, Vol.32 No.7, pp. 725-738. https://doi.org/10.1108/JOCM-07-2017-0268

Moran, A. and Moran, A. (2014), *Agile risk management* (pp. 33-60). In: Agile Risk Management. Springer Briefs in Computer Science. Springer, Cham. https://doi.org/10.1007/978-3-319-05008-9_3

Nonaka, I. and Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*, Oxford University Press.

Orłowski, C., Deręgowski, T., Kurzawski, M. and Ziółkowski, A. (2017), "Evaluation of readiness of IT organizations to agile transformation based on case-based reasoning", *ACIIDS 2017: Intelligent Information and Database Systems*, Vol.10192, pp. 787-797.

Park, S. and Park Park, S. (2021), "How can employees adapt to change? Clarifying the adaptive performance concepts", Human Resource Development Quarterly, Vol.32 No.1, pp. E1-E15. https://doi.org/10.1002/hrdq.21411

Pitafi, A.H., Rasheed, M.I., Islam, N. and Dhir, A. (2023), Investigating visibility affordance, knowledge transfer and employee agility performance. A study of enterprise social media, *Technovation*, Vol.128, 102874. https://doi.org/10.1016/j.technovation.2023.102874.

Rael, R. (2017), Smart Risk Management: A guide to identifying and calibrating business risks. John Wiley & Sons.

Rebelo, T. and Gomes, A.D. (2011), "Conditioning factors of an organizational learning culture", *Journal of Workplace Learning*, Vol.23 No.3, pp. 173-194. https://doi.org/10.1108/13665621111117215.

Spector, P.E. and Brannick, M.T. (2011), "Methodological urban legends: the misuse of statistical control variables", Organizational Research Methods, Vol.14 No.2, pp. 287-305. https://doi.org/ 1094428110369842.

Young, H.P. (2009), "Learning by trial and error", Games and Economic Behavior, Vol.65 No.2, pp. 626-643.

Zanjirchi, S.M., Jalilian, N. and Mirhoseini, A. (2017), "Risk-agility interactive model: a new look at agility drivers", *Journal of Modelling in Management*, Vol.12 No.4, pp. 690-711. https://doi.org/10.1108/JM2-01-2016-0007

Zastempowski, M. and Cyfert, S. (2023), "A new angle on SMEs' competitiveness. How do agility capabilities affect a firm's competitive position?", *Journal of Organizational Change Management*, Vol.36 No.4, pp. 635-

662. https://doi.org/10.1108/JOCM-09-2022-0255

Zinn, J.O. (2020), Understanding Risk-Taking: Critical Studies in Risk and Uncertainty, Palgrave Macmillan, Cham.