

Impact of Knowledge Management Information System on Organizational Productivity Through Employee Engagement: An Empirical Evidence from I.T. Industry

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Abstract- This research study investigates the relationship between knowledge management information systems and Organizational Productivity with the mediating role of knowledge work productivity. Their effects have been discussed. Data has been collected from the employee of the I.T. sector. Path analysis has been run, and results have been discussed. The results are based on a detailed survey of questionnaires. The final result shows that knowledge management positively impacts the performance of an organization. Moreover, knowledge work productivity plays an important and positive moderating role between the knowledge management process and Organizational Productivity

Keywords- Knowledge Management Information Processes, Employee Engagement and Organizational Productivity.

I. INTRODUCTION

Companies in the modern era have to deal with market volatility, uncertainty, intense competition, and accelerated transitions [1]. Because of its significance, information is often prioritized over a company's more tangible assets like cash, land, or employees [2-3]. Managers should pay greater attention to Knowledge Management (K.M.) projects as companies often focus on how Employee Engagement (K.S.) practices may boost their performance because "knowledge" is the driving force of any knowledge-driven economy. Advantages creation, competitiveness, and strategy formulation are all areas where businesses have begun to see the value of K.S. techniques [4-8] all agree that K.S. practises are essential for boosting value creation,

competitiveness, and the quality of employees' decision-making. An organization's knowledge and information are managed through developing, sharing, using, and managing them [9-10]. Higher education institutions (HEIs) play a critical role in knowledge production, collection, archiving, and dissemination, all of which have the potential to greatly advance societal and economic development [11-12]. A university is a knowledge-based institution, and a heightened focus on Knowledge Management (K.M.) functions as a catalyst for more cooperation and inquiry among its members [13-14]. Knowledge management (K.M.) is a rapidly developing topic of study. There are a plethora of forthcoming national and international conferences and seminars focused on Knowledge Management. In the field of knowledge management, several academic institutions worldwide are actively engaged in teaching and research. It is gaining traction in education due to the growing need for open educational resources. It has enormous potential and should be of similar or greater importance in education. The accumulation of information and history lessons contribute to the formation of fresh insights. The value of knowledge-based resources as competitive tools is growing, contributing to increased organisational Productivity (O.P.). Knowledge management aims to put employees in touch with those who already possess the information or expertise they need to do their jobs effectively. Useful for any business looking to educate and develop its workforce. This is a realistic way for a business to raise the bar for its employees by facilitating the sharing of more knowledge and developing their talents. They may find their training to be more effective as a result of this. Knowledge management is becoming increasingly vital in today's

modern world. Since the number of firms offering comparable products and services is growing. To maintain a competitive edge, it is essential to construct an organisation that is both adaptable and well-managed. It is important to be prepared to handle any issue, large or little, whether you are physically present or not. Even if you are far away from the region of the problem, you should be able to manage it using these skills. I do not think it is a stretch to suggest that knowledge management is the foundational mechanism for any business hoping to expand its revenue and client base. Knowledge management aims to provide a company with an [competitive] edge through developing, disseminating, and utilising its knowledge. (Knowledge 2.0: John and JoAnn Girard at the Helm) Value creation from an organisation's intellectual and information-based assets is the goal of knowledge management (K.M.) (Meridith Levinson CIO Magazine). A company's knowledge management (or "K.M.") system is responsible for organising the company's collective body of information and wisdom. (K.M. World, Michael E. D. Koenig) Finding, recording, sorting, distilling, and presenting facts, information, and knowledge for a specific purpose and to benefit a specific organisation or community is the goal of Knowledge Management. The (Dennis J. King Humanitarian Information Unit, United States Department of State (PDF). A knowledge management concept includes the gather function (data and information dimensions) and the link function (knowledge and wisdom). In their book "Knowledge Management Praxis," authors Kurt April, Farzad Ahmadi Izadi, and Farzad Ahmadi say as much. It is up to the individual to decide what constitutes effective knowledge management (K.M.). A lack of consensus on a single meaning of the phrase may indicate its nebulous nature, requiring a different interpretation from each company that embraces the idea. Information, Research, 8(1), R070 (Angela Abell and Nigel Oxbrow). You may use your expertise to run your business better when you realise your expertise is valuable. As in (Nick Milton, Knoco).

II. LITERATURE REVIEW

Knowledge management process and Organizational Productivity are introduced to kick off this study of relevant literature. The impact of Employee engagement (both explicit and implicit) on Organizational Productivity is then discussed. Nonetheless, there is a lack of studies examining how employee engagement influences the connection between the knowledge management process and organisational effectiveness.

2.1. Knowledge Management Information System:

Information that is "contextual, relevant, and actionable" is what we mean when we say "knowledge" [15-16]. A knowledge repository systematises an organisation's accumulated wisdom and experience. While information is always changing and expanding, a KMS ensures that knowledge flows from those who know to those who need to know inside an organisation [17].

Multiple models for characterising knowledge management procedures have been published in the literature thus far. An analysis of the existing literature reveals that knowledge management includes creation, storage, dissemination, and application. Listed below are the steps that need to be taken:

Generation of New Information: To achieve its objectives, an organisation must use its internal and external resources to create new knowledge. Based on previous studies of prosperous businesses and intellectual processes and studies on better-using customers' and suppliers' knowledge characteristics, [18] identified the best methods to generate such knowledge. Documenting and keeping knowledge is part of storing knowledge, which allows individuals and businesses to access previously stored information. In recognising, encoding, storing, and retrieving information, technological systems (such as modern information software and hardware) and human approaches are commonly applied [19]. Businesses may protect themselves from the wasteful impacts of duplicate work, inefficient processes, and unanticipated challenges by storing relevant information [20].

Putting one's understanding to use entails deciding on a course of action in light of all relevant information, increasing one's organisation's Productivity, and achieving one's stated objectives. A company's services, processes, and products would benefit from incorporating its accumulated knowledge [21]. This seems like a tricky issue for businesses to tackle. Before putting knowledge management into practice, developing a solid foundation for doing so may have significant results. A knowledge application framework may be considered a set of guiding principles highlighting the building blocks of effective knowledge management in organisations.

2.2 Organizational Productivity:

The practice of monitoring and improving how well your organisation uses its resources to carry out its goals is known as "organisational productivity management." (Three Georges N. Root) What we mean by "organisational productivity" here also includes the degree to which an organisation completes a project and achieves its stated objectives. The financial performance of an organisation (profits,

return on assets, return on investment, and so on), the market performance of an organisation (sales, market share, and so on), and the shareholder return all contribute to what is known as an organisation's Productivity (total shareholder return, economic value added, etc.) [22].

To define the success of a multinational enterprise (MNE), it is important to note that "financial indicators show the attainment of an MNE's economic goals in financial terms" [23]. Every firm's management team has to be dedicated to boosting organisational Productivity. Every company ought to have a comprehensive measuring index in place to ensure that all employees know exactly what they should do to achieve the company's stated goals [24]. The "wisdom" of constant knowledge production, transfer, and interpretation within preexisting knowledge frameworks in other parts of the organisation are essential for achieving these organisational goals [25]. Informal knowledge processes, such as socialisation and integration, have a substantial impact on company performance, as stated by [26].

2.3. Participation and Involvement of Workers:

[27] defines knowledge sharing (K.S.) as "the extent to which an organisation's personnel are willing to impart, disseminate, and exchange information that is both useful and important to the organisation's success" [28-29]. To wit: [30-31] note that empowering employees may take several forms, one of which is encouraging them to share the information they have gained in their job, whether that knowledge is based on individual beliefs or the policies and procedures of the company [32]. In a business context, "culture" refers to the established values, customs, and mindsets held by all employees [21]. From an epistemological perspective, Employee Engagement may be broken down into explicit Employee Engagement (EKS) and implicit Employee Engagement, as stated by [33]. (TKS).

Information, scientific formulae, and technical specifications are examples of explicit knowledge's written and numeric representations. This information can be passed on formally and methodically from one person to another.

Tacit knowledge is extremely nuanced and convoluted, making it difficult to codify and disseminate to others. Knowledge of this sort involves guesses, speculation, and personal reflection. One's actions and experiences, as well as core values, beliefs, and emotions, provide the foundation for tacit knowledge.

The key to Employee Engagement is unlocking the value of employees' tacit and subjective knowledge and making it accessible to others inside the company. Nonaka and Takeuchi say businesses are living

organisms with a shared sense of identity, just like people do. This calls for effective two-way communication inside the company, using either tacit or explicit means, and primarily four models:

From one person to another, in a master-apprentice fashion; tacitly.

From explicit to explicit: compile information from several departments to produce a comprehensive report on a company's financial health.

Knowledge is more accessible when it is transferred from the tacit to the explicit form, which occurs when an employee articulates and imparts their expertise.

From explicit to tacit: People can develop a deeper comprehension of common explicit information, which can give rise to or enrich an additional layer of tacit understanding.

2.4 Knowledge Management Information Process and Organizational Productivity:

Information management is said to increase a company's competitiveness, Productivity, and profitability [34]. According to [35], a knowledge management strategy should centre on business processes because of the close relationship between company strategy and business processes. More and more works, such as Donate and Canales, are highlighting the significance of knowledge management to an organisation's performance over the long run (2011). Knowledge sharing among staff members is essential in today's knowledge-based economy [36].

Research by [37] draws a connection between knowledge management and organisational Productivity, providing another justification for businesses to adopt such tactics. The strategic importance of knowledge management is, thus, critical to an organisation's ability to remain competitive in its industry [38]. A higher level of organisational Productivity, they said, necessitates the efficient management of high-performing knowledge workers' ideas, experiences, and the skills and behaviours that underpin them.

H1: Organizational Productivity is enhanced by using a Knowledge Management information system.

2.5 Knowledge Management and Employee Engagement:

Companies must successfully leverage and deploy strategic instruments like knowledge management and employee engagement to compete in today's fast-paced business climate. Because knowledge and organisation are intrinsically connected to human beings, it stands to reason that they are intrinsically related. [39].

Knowledge management and Employee Engagement have been priorities for businesses since the 1990s.

The researcher looked at various studies from developed to developing countries and studies conducted in Pakistan to link and build the rationale on the stated construct to apply to the Pakistani service sector. They discovered a strong positive relationship between knowledge management, Employee Engagement, and Organizational Productivity. According to [40], firms nowadays need to manage information sharing to maintain organisational effectiveness and boost performance since knowledge is the most significant aspect of production.

[41] linked organisational Employee Engagement with the sustainable growth of Pakistan's banking sector. [12] uncovered the guiding role of organisational learning, organisational transformation, and information sharing on knowledge management in his study of the corporate sector in Pakistan.

H2: In a good way, the informational process of knowledge management increases employee engagement.

2.6 Employee Engagement and Organizational Productivity :

Effective knowledge management [23] is a critical factor in an organisation's success; as a result, Employee Engagement is fostered inside the business. According to Cabrera et al., organisational Employee Engagement is guided by information exchange, which begins with individual knowledge and grows into group knowledge and then organisational knowledge (2006). This information gives you a major leg up on the competition [24]. Employee engagement may be seen as the process through which information

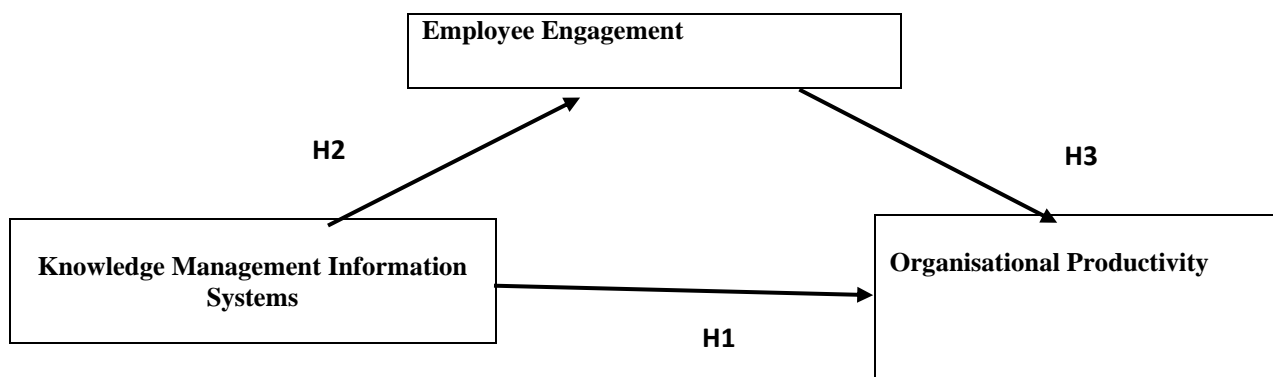
sharing based on a shared corporate vision is incorporated into an organisation's strategy. According to [28], establishing a corporate vision is insufficient unless and until it is communicated effectively throughout the organisation.

Understanding the link between organisational learning and major outcomes, as proposed by [7]. Several authors, including [16], [32], [36] and [40], and others, have backed the idea of employee engagement in the workplace and agreed that it improves Productivity and efficiency by leveraging the combined knowledge and perspectives of workers. According to [42], team-level information exchange inside an organisation boosts Productivity in the workplace as a whole.

H3: To determine the impact of Employee Engagement on organisation performance.

H4: To identify the relationship between knowledge management information systems on Organizational Productivity through Employee Engagement.

RESEARCH MODEL:



III. METHODOLOGY

Questionnaires were made and distributed to the different employees of the organisations, which shows that almost 80% of the response were confidential and good.

IV. MEASUREMENTS

Throughout this investigation, 40 different instruments were used to collect data. The questionnaire used a 5-point Likert scale, with 1 representing strongly disagreeing and 5 representing strongly agreeing. Following is a list of them: Numbers 1 through 5 indicate how strongly you agree or disagree with a statement. I have focused on the knowledge worker to better understand the relationship between the knowledge management process and organisational Productivity.

Knowledge Management Information System:

"Knowledge Management" Girard, refers to the systematised approach taken by an organisation to the tasks of generating, disseminating, utilising, and controlling its store of information and expertise. Given its origins, it is not hard to see how the idea of "knowledge management" (which, in my opinion, should be viewed as an offshoot or extension of "organisational learning") may expand and evolve through time. Gurdal and Kumkale argue that knowledge management is essential since it helps the company. Once information about an organisation has been gathered, codified, and archived, it should be made available to as many people as possible. It is essential to effect a cultural shift inside the company and amongst its employees to achieve this goal. Staff employees should be encouraged to share their expertise, understanding that doing so will not adversely affect their standing within the business [26].

Organisation Productivity:

Organisational Productivity comprises the actual output or result of an organisation. Knowledge management's value lies in increasing individual, team and organisational efficiency through implementing knowledge management concepts. The higher the level of capturing knowledge (explicit or tacit) with information technology tools, the better the K.M. result.

Employee Engagement:

Employee empowerment can take various forms, including encouraging them to share their knowledge

[20] and arising from personal thought systems and institutional frameworks [38]. Within an organisation, "culture" refers to shared ideals, norms, accepted procedures, or employee attitudes [21].

Data Collection

The data was gathered through a predetermined, pre-tested questionnaire with predetermined, pre-tested answers. A standardised questionnaire was developed through a thorough analysis of the existing research. Likert seven-point scales are more trustworthy and adequate since most questionnaire items are designed to gauge respondents' attitudes and perceptions. Research experts and a representative sample of respondents reviewed the questionnaire's draught version before publicising it. The survey's seven-point scale runs from "strongly disagree" (SDA) to "strongly agree" and is designed to capture the research's most salient factors (S.A.).

Theoretical exploration of hypotheses

V. RESULTS AND DISCUSSION

H1 in Table 1.1, which states that an organisation's Productivity is positively correlated with its use of a knowledge management information system, was supported by the data. A positive association between these two factors was also supported by the correlation coefficient, $R=0.58$, with a significance level of $p 0.05$. With a P.I. of 0.52 at a significance level of 0.05, the beta coefficient value () indicates that a knowledge management information system is crucial in improving an organisation's efficiency. This demonstrates how Knowledge Management systems may help boost efficiency in the workplace. Therefore, we accept H1. Similar to H1, KMIS positively affects E.E. in H2 (with a coefficient value of 0.14) at the 0.00 level of significance. In contrast, the coefficient value of 0.66 indicates that E.E. has a favourable and considerable influence on organisational Productivity.

Table 1.1: Summary of Hypotheses results H1-H3

Connection Between Variables	Beta value	Critical Value	P value	Decision/ Remarks
β_1 (OP←KMIS)	0.52	14.55	0.00	Supported
β_2 (EE← KMIS)	0.41	12.54	0.00	Supported
β_3 (OP← EE)	0.66	19.81	0.00	Supported

Table 1.2: Mediation results table – H₄

Variables Connections	Total effect	Direct effect	Indirect effect	Remarks	Level of mediation
B_4 (OP←EE ← KMIS)	$\beta= .801$ $p = .000$	$\beta= .541$ $p = .001$	$\beta= .260$ $p = .002$	Significant	Partial

Mediation Analysis

Standardised estimations of the association between O.P. and E.E. and KIMS show a beta value of 0.641 (Table 1.2), with a p-value of 0.00, indicating that KIMS significantly mediates O.P. among IV and DV. The significance of the mediation of KMIS and O.P. between IV and DV via E.E. is shown by a beta value of 0.641 for standardised evaluations of the link between O.P. and E.E. and KMIS and a p-value of 0.01.

Discussion:

Using a mediator analysis, we found that high levels of employee engagement had a substantial, beneficial impact on the connection between knowledge management and business outcomes like Productivity. The ramifications are as follows:

Practical Implications:

The good effects of implementing the new Employee Engagement strategies will be felt by all members of the company, which is why the findings of this study are so important. Managers that can think beyond the box and inspire their staff will be successful. Gaining the interest and dedication of one's workforce is crucial to the success of any business. Organisational success correlates with high levels of knowledge management and high personnel performance. Employees should be given training and development opportunities through

Staff members are more invested in the company's success when given the resources they need to do their jobs well. As a result of its perceived difficulty and lengthy duration, many employees resist change in the workplace. The company must have effective knowledge management. In today's knowledge-based, competitive economy, businesses that reward and incentivise their staff to engage in these activities have been able to thrive.

Future Directions and Limitations

Since the scope of this study is broad and not restricted to any one element of an organisation, further studies focusing on certain types of organisations may provide different results, and more dimensions of knowledge might be included as moderating factors. Future studies should explore the impact of knowledge management characteristics such as knowledge innovations and trust and the possibility of adjusting direct and indirect variables to better understand the connection between knowledge management and organisational performance. A variety of techniques for gathering and analysing data are available.

REFERENCES

- [1] Richter, N. F., Schmidt, R., Ladwig T.J. & Wulhorst, F. (2017). A critical perspective on the measurement of performance in the empirical multinationality and performance literature, *Critical perspectives on international business*, Vol. 13 No. 2, pp. 94-118.
- [2] Richter, N. F., Schmidt, R., Ladwig T.J. & Wulhorst, F. (2017). A critical perspective on the measurement of performance in the empirical multinationality and performance literature, *Critical perspectives on international business*, Vol. 13 No. 2, pp. 94-118.
- [3] Alavi, M., & Leidner, D. E. (2001). Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. *MIS Quarterly*, 25(1), 107-136. <https://doi.org/10.2307/3250961>
- [4] Alhammad, F, Faori, S. & Abu Husan, L. (2009). Employee Enagement in the Jordanian Universities, *Journal of Knowledge Management Practice*, Vol.10, No. 3.
- [5] Alhawari, S., Karadsheh, L., Talet, A. N., & Mansour, E. (2012). Knowledge-based risk management framework for information technology project. *International Journal of Information Management*, 32(1), 50-65. <https://doi.org/10.1016/j.jinforomgt.2011.07.002>
- [6] Bartol, K. M., & Srivastava, A. 2002. Encouraging Employee Enagement : The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1), 64–76
- [7] Bogner, W.C. & Bansal P (2007). Knowledge Management As The Basis Of Sustained High Performance. *Journal of Management Studies*, 44, 165-88.
- [8] Bontis, N., Dragonetti, N.C., Jacobsen, K. and Roos, G. (1999), "The knowledge toolbox: a review of the tools available to measure and manage intangible
- [9] Bosch-Sijtsema, P. M., V. Ruohomäki, and M. Vartiainen. 2009. "Knowledge Work Productivity in Distributed Teams."
- [10] Cabrera, A. Collins WC & Salgado J.F. (2006). Determinants of individual engagement in Employee Enagement . *International Journal of Human Resource Management*, 17(2), 245-64.
- [11] Carrillo, P. Robinson, H. Anumba, C & Al-Ghassani A (2003). IMPaKT: a framework for linking knowledge management to business performance. *Electronic Journal of Knowledge Management*, 1(1), 1-12. Critical perspectives

- on international business, Vol. 13 No. 2, pp. 94-118.
- [12] Danish RQ (2012) Impact of Knowledge Management Practices on Organizational Productivity : an Evidence from Pakistan. *International Journal of Scientific and Engineering Research*, 3(8).
- [13] Donate, M. J. & Canales, J. I. (2011). A new approach to the concept of knowledge strategy. *Journal of Knowledge Management*, 16(1), 22-44.
- [14] Drucker, P. F. 1999. "Knowledge-Worker Productivity: The Biggest Challenge." *California Management Review* 41 (2):
- [15] Gold, A. H. Malhotra A, & Segars, A. H. (2001). Knowledge Management: an Organizational Capabilities Perspective. *Journal of Management Information Systems*, 18(1), 185-214.
- [16] Grinsven, M. V. & Visser, M. (2011). Empowerment, knowledge conversion and dimensions of organizational learning. *The Learning Organization*, 18(5), 378- 391.
- [17] Hassan, M. (2013). Inter Relationships between Learning Orientation, Relationship Orientation, and Business Performance: an Empirical Study on Pakistani Banking Sector, *Middle-East Journal of Scientific Research*, 16(7), 957-966.
- [18] J. Rhodes, R. Hung, P. Lok, B.Y.-H. Lien, C.-M. Wu Factors influencing organizational knowledge transfer: Implication for corporate performance *Journal of Knowledge Management*, 12 (2008), pp. 84-100
- [19] Kianto, A., M. Shujahat, S. Hussain, F. Nawaz, and M. Ali. 2019. "The Impact of Knowledge Management on Knowledge
- [20] King WR, Marks PV. 2008. Motivating Employee Engagement through a knowledge management system. *OMEGA: The International Journal of Management Science*, 36, pp. 131 – 146
- [21] King, W. 2007. A research agenda for the relationships between culture and knowledge management, *Knowledge and Process Management*, 14 (3), pp. 226–236,
- [22] Lee, H. and B. Choi, Knowledge management enablers, processes, and Organizational Productivity: An integrative view and empirical examination. *Journal of management information systems* 2003;
- [23] Lee, L. T. & Sukoco, B. M. (2007). The effects of Entrepreneurial Orientation and Knowledge Management Capability on Organizational Effectiveness in Taiwan: the moderate role of Social Capital. *International Journal of Management*, 24(3), 549-573.
- [24] Lin, H. F. (2011). Antecedents of the Stage-based Knowledge Management Evolution. *Journal of Knowledge Management*, 15(1), 136-155.
- [25] Mahesh, K. & Suresh, J. K. (2009) Knowledge Criteria for Organization Design. *Journal of Knowledge Management*, 13 (4), 41-51.
- [26] Mohapatra, S., Agrawal, A., & Satpathy, A. (2016). Knowledge Management Cycles. In *Designing Knowledge Management-Enabled Business Strategies* (pp. 13-29). Springer, Cham. ISBN 978-3-319-33894-1
- [27] Mohapatra, S., Agrawal, A., & Satpathy, A. (2016). Knowledge Management Cycles. In *Designing Knowledge Management-Enabled Business Strategies* (pp. 13-29). Springer, Cham. ISBN 978-3-319-33894-1
- [28] Nonaka and Takeuchi. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press.
- [29] Oluikpe, P. (2012). Developing a Corporate Knowledge Management Strategy. *Journal of Knowledge Management*, 16(6), 862-878
- [30] Osborne, M. (2004). Making the most of the best: Formulating a Knowledge Management strategy for a Government Advisory Body. *Australian Journal of Public Administration*, 63(3), 43-52.
- [31] R.K. Lahti, E.D. Darr, V.E. Krebs Developing the Productivity of a Dynamic Workforce: The Impact of Informal Knowledge Transfer *Journal of Organizational Excellence*, 21(2) (2002), pp. 13-21
- [32] Rasmussen, P. & Nielsen, P (2011). Knowledge Management in the firm: Concepts and Issues. *International Journal of Manpower*, 32(5/6), 479-493.
- [33] Richard, Pierre J.; Devinney, Timothy M.; Yip, George S.; Johnson, Gerry (2009-02-06). "Measuring Organizational Productivity: Towards Methodological Best Practice". *Journal of Management*. SAGE Publications. 35(3): 718–804).
- [34] Richter, N. F., Schmidt, R., Ladwig T.J. & Wulhorst, F. (2017). A critical perspective on the measurement of performance in the empirical multinationality and performance literature, *Critical perspectives on international business*, Vol. 13 No. 2, pp. 94-118.
- [35] S. Tseng, P. Lee Soliman, F. and Youssef, M. (2003), "The role of critical information in enterprise knowledge management", *Industrial Management & Data Systems*, Vol. 103 No. 7, pp. 484-90.

- [36] Song, J. H. Jeung, C. W. & Cho, S. H. (2011). The Impact of the learning organization environment on the organizational learning process in the Korean Business Context. *The Learning Organization*, 18(6), 468-485.
- [37] Stein, E. W. (1995). Organization memory: Review of concepts and recommendations for management. *International journal of information management*, 15(1), 17-32. [https://doi.org/10.1016/0268-4012\(94\)00003-C](https://doi.org/10.1016/0268-4012(94)00003-C)
- [38] Szulanski G. 1996. Exploring internal stickiness: impediments to the transfer of best practice within the firm. *Strategic Management Journal* 17(1): 27-43
- [39] Tarlatt, A. (2013). *Implementierung von Strategien im Unternehmen*. Springer-Verlag. ISBN 978-3-322-90319-8
- [40] Wang, Y. L. & Ellinger, A. D. (2011). Organizational Learning: Perception of External Environment and Innovation Performance. *International Journal of Manpower*, 32(5/6), 512-536.
- [41] Whelan, E. & Carcary, M. (2011). Integrating Talent and Knowledge Management, Where are the Benefits?. *Journal of Knowledge Management*, 15(4), 675-687. Worker Productivity.” *Baltic Journal of Management* 14 (2)
- [42] Zellmer-Bruhn, M. & Gibson, C. (2006). Multinational organization context: implications for team learning and performance. *Academy of Management Journal*, 49, 501-18.