Том 6. Тенденції розвитку системи менеджменту та маркетингу в сучасних умовах та стратегічне управління інноваційним розвитком на макро- і мікрорівні

2) Translational – the course of the study is directed from causal bases to consequences;

3) Direct-associated with the transition of thought from specific concepts to generic, from generic to typological (inductive generalization) [3, p. 156].

Therefore, the methods of analysis and synthesis, in the context of professional development of an economist, should be considered as interdependent. Correct and effective use of analysis and synthesis methods requires a specialist to develop abstract, logical and critical thinking, the ability to operate a professional categorical and conceptual apparatus and work at the level of generalized knowledge, the ability to model and implement the reconstruction procedure.

References:

- Bratuta O.G. means of conducting scientific research as an element of methodological support for Ukrainian economic science. *Global and national economic problems*. 2016. №. 14. P. 8-16.
- 2. Vazhinsky S.E., Shcherbak O.O. Methodology and organization of scientific research. Sumy: Sumdpu named after A.S. Makarenko, 2016. 260 p.
- 3. Капіца В. Ф. Філософія науки як ноосфера інноваційного мислення і ноо-пізнання : монографія. Кн. 2. Кривий Ріг : Видавничий центр ДВНЗ «КНУ», 2018. 797 с.
- 4. Ushenko O.G., Dubolazov O.V. Chernivtsi: Chernivtsi National University. CNT, educational and methodical manual «methods of scientific research». 2022, 142 p.
- 5. Grynko T. Methodological approaches to improve the quality of enterprise management. Competitiveness of entrepreneurial structures: features and prospects: Collective monograph. Agenda Publishing House, Coventry, United Kingdom, 2018. P. 4-12.
- 6. Grynko T., Krups'kyy O. Role of Cognitive Style of a Manager in the Development of Tourism Companies' Dynamic Capabilities. Tourism and hospitality management, 2018. Vol. 24. Issue 1. P. 1-21.

Prof. Ph.D. Wendy Farrell

Management Center Innsbruck (Austria) VIRTUAL REALITY: DEVELOPING SOFT SKILLS AND MANAGERIAL DECISION-MAKING TOOLS

Employees have a strong impact on how successful their organizations are. On the other hand, organizations have a significant impact on their employees' ability to contribute to said success. Thus, it can be said, that Managers can indirectly affect macro-level variables like capabilities by making micro-level decisions like

«ЕКОНОМІКА І МЕНЕДЖМЕНТ 2023: Перспективи інтеграції та інноваційного розвитку»

offering training [10]. But not all training is equal. Frontal instructor-led training that is more focused on rote learning tends to be far less effective than experiential learning [3]. The challenge is often creating opportunities for learners to experience situations corresponding to the topic at hand in a safe environment. It is within this context that Virtual Reality (VR) educational immersive simulations are growing in relevance.

Today's educational landscape, both in higher education [9] and in corporate environments [4], has increasingly changed towards the integration of digital technologies, with the aim of improving the effectiveness of the educational offer and enhancing the level of interaction between teachers and learners. VR case studies are expected to be helpful in management education.

First, VR case studies allow learners the option to take part in realistic simulations of complex problems, which may be difficult or impossible to recreate in a traditional classroom setting. Such simulations offer learners hands-on experience in a virtual setting [5]. Such experiences would help learners better understand the challenges and opportunities associated with managing in a variety of scenarios.

Second, the interactive nature of VR case studies offers a more captivating and immersive experience than conventional case studies or lectures [12]. Studies have shown that immersive VR simulations lead to improved learner engagement/attention, increased ability to focus on the task, skill improvement [8], increased confidence, and overall satisfaction with their experience [2]. While the user experience depends on the technology used, it is expected that learners who will use the VR case studies for management education will report positive experiences and benefits similar to those mentioned above.

Third, studies show that passive learning is less effective than active learning. In contrast to traditional case studies where learners apply theory through reflection, with virtual case studies learners are tasked with making decisions. This allows them the opportunity to test out various ideas and strategies [13]. They will then receive feedback during the debriefing that will aid in the development of their analytical, decision-making, and problem-solving abilities.

Forth, although initially developing the expertise is cost intensive [1], once the competencies have been developed, it is expected that VR case studies will be more cost effective [11].

Том 6. Тенденції розвитку системи менеджменту та маркетингу в сучасних умовах та стратегічне управління інноваційним розвитком на макро- і мікрорівні

Finally, many studies have highlighted the increased safety VR offers [7, 11]. Such safety could be an important factor for where visits to potentially dangerous settings can be avoided through the incorporation of VR.

Accordingly, this study will focus on the following research questions:

RQ1: How can VR case studies be incorporated into the lesson plan in a meaningful and value add way so that the overall user experience is more positive then just using.

RQ2: To what extent will learners perceive the VR case study to be more effective, more immersive and contributing to a deeper understanding of the desired learning outcome than more traditional methods?

Methods. This research will utilize a mixed methods approach and will collect both qualitative and quantitative data. The sample will consist of working professionals enrolled in a degree program.

First, following Lee et al. [6], learners will complete a short survey prior to their experience to gain insight into their previous experience with VR and general knowledge of the subject matter.

During the simulation, anonymous data will be collected from the simulation. This data will be given by the percentage of learners who looked in a given direction, actions taken, decisions made, and overall outcome.

During the debrief, areas will be identified where and how the experience contributed to lesser or greater achievement of the desired learning outcome. Following the experience, learners will complete a questionnaire. As part of the discussion, user experience feedback will be sought.

Finally, learners will be given a survey based on the unified theory of acceptance and use of technology [14] to understand the their Behavioral Intention to Use, Perceived ease of use, Perceived Usefulness, Subjective Norm, Anxiety, and Self-efficacy. The survey will also include UX questions related to their enjoyment of the system and any potential cybersickness experienced.

Conclusion. It is expected that this study will lead to greater achievement of the desired learning goals. Lessons learned will include the user experience and factors leading to the intention to use VR for learning in the future. Furthermore, it will lead to the development of competencies in Virtual Reality in the context of teaching, learning, and developing.

« ЕКОНОМІКА І МЕНЕДЖМЕНТ 2023: Перспективи інтеграції та інноваційного розвитку»

References:

- 1. Baniasadi, T., Ayyoubzadeh, S. M., & Mohammadzadeh, N. (2020). Challenges and Practical Considerations in Applying Virtual Reality in Medical Education and Treatment. *Oman Medical Journal*, *35*(3), e125-e125. https://doi.org/10.5001/omj.2020.43.
- Blair, C., Walsh, C., & Best, P. (2021). Immersive 360° videos in health and social care education: A scoping review. *BMC Medical Education*, 21(1), 590. https://doi.org/10.1186/s12909-021-03013-y.
- 3. Dean, K. L., Wright, S., & Forray, J. M. (2020). Experiential Learning and the Moral Duty of Business Schools. *Academy of Management Learning & Education*, *19*(4), 569-583. https://doi.org/10.5465/amle.2018.0335.
- 4. Kimiloglu, H., Ozturan, M., & Kutlu, B. (2017). Perceptions about and attitude toward the usage of e-learning in corporate training. *Computers in Human Behavior*, 72, 339-349. https://doi.org/10.1016/j.chb.2017.02.062.
- Kumar, V. V., Carberry, D., Beenfeldt, C., Andersson, M. P., Mansouri, S. S., & Gallucci, F. (2021). Virtual reality in chemical and biochemical engineering education and training. *Education for Chemical Engineers*, *36*, 143-153. https://doi.org/10.1016/j.ece.2021.05.002.
- 6. Lee, H., Woo, D., & Yu, S. (2022). Virtual Reality Metaverse System Supplementing Remote Education Methods: Based on Aircraft Maintenance Simulation. *Applied Sciences*, *12*(5), Article 5. https://doi.org/10.3390/app12052667.
- Luo, H., Yang, T., Kwon, S., Li, G., Zuo, M., & Choi, I. (2021). Performing versus observing: Investigating the effectiveness of group debriefing in a VR-based safety education program. *Computers & Education*, 175, 104316. https://doi.org/10.1016/j.compedu.2021.104316.
- 8. McGovern, E., Moreira, G., & Luna-Nevarez, C. (2020). An application of virtual reality in education: Can this technology enhance the quality of students' learning experience? *Journal of Education for Business*, *95*(7), 490-496.
- 9. Nugroho, I., Paramita, N., Mengistie, B. T., & Krupskyi, O. P. (2021). Higher education leadership and uncertainty during the COVID-19 pandemic. *Journal of Socioeconomics and Development*, 4(1), 1-7. https://doi.org/10.31328/jsed.v4i1.2274.
- 10. Palmié, M., Rüegger, S., & Parida, V. (2023). Microfoundations in the strategic management of technology and innovation: Definitions, systematic literature review, integrative framework, and research agenda. *Journal of Business Research*, *154*, 113351. https://doi.org/10.1016/j.jbusres.2022.113351.
- Paszkiewicz, A., Salach, M., Dymora, P., Bolanowski, M., Budzik, G., & Kubiak, P. (2021). Methodology of Implementing Virtual Reality in Education for Industry 4.0. *Sustainability*, 13(9), Article 9. https://doi.org/10.3390/su13095049.
- 12. Radianti, J., Majchrzak, T.A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. *Computers & Education*, 147, 103778. https://doi.org/10.1016/j.compedu.2019.103778.
- Saab, M.M., Hegarty, J., Murphy, D., & Landers, M. (2021). Incorporating virtual reality in nurse education: A qualitative study of nursing students' perspectives. *Nurse Education Today*, 105, 105045. https://doi.org/10.1016/j.nedt.2021.105045.
- Venkatesh, V., & Zhang, X. (2010). Unified Theory of Acceptance and Use of Technology: U.S. Vs. China. *Journal of Global Information Technology Management*, 13(1), 5-27. https://doi.org/10.1080/1097198X.2010.10856507.