

Managing Knowledge in a Tourism Crisis: A Case Study From Poland

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Abstract: Purpose: This study deals with a tourism organisation from Poland, which experienced not only the COVID-19 pandemic, but also the close war situation in Ukraine which caused a significant decrease in tourist traffic and revenues. Since, based on the literature, knowledge management can be useful for crisis management, this study aims to explore the role and usefulness of KM during crisis situations in tourism. Methodology: Qualitative in-depth analysis was conducted by using data collected via semi-structured interview with the CEO of a local tourism organisation in Poland. The research output is presented in the form of a single case study with that organisation as the unit of analysis. Findings: The case highlighted that: a) a crisis may not be the most appropriate time for the implementation of KM from the scratch in an organisation; b) having some minimal KM experience can be essential for a more structured and complex KM approach; c) organisations may benefit from lessons learned during the crisis to get insights for developing KM. These findings suggest that practitioners and policymakers facilitate KM awareness among tourism organisations to enhance resilience in coping with future crises. Research limitations: This is a single case study and thus it cannot be easily generalised or provide a comprehensive overview of the whole sector. It is also a case study from a single country, affected by two serious crises which limits the applicability of the results to other countries. Practical implications: The study provides useful insights for practitioners in tourism organisations aspiring to improve internal processes of knowledge management and thus mitigating the future tourism crises. Originality/value: This paper contributes to the body of knowledge in terms of the role and relevance of KM during the tourism crisis. It provides food for thought for researchers investigating the knowledge and crisis management processes within the tourism industry.

Keywords: Knowledge Management, Tourism Crisis, Tourism, Case Study

1. Introduction

Knowledge management has proven its applicability and usefulness in many different organisational contexts and areas. According to some studies, knowledge management can support many organisational activities, such as innovation management (Andreeva and Kianto, 2011; Vaccaro et al, 2010), organisational performance (Junges et al, 2015), or sustainability (Martins et al, 2019). Knowledge management has also been useful in many different sectors, for example for the organisations from the KIBS (knowledge-intensive business services) sector (Zieba, 2021), construction industry (Fong and Choi, 2009) or tourism industry (Anand et al, 2023; Martínez-Martínez et al, 2015).

Knowledge management has also been indicated as potentially useful in case of a crisis or disaster situation in tourism (Mistilis and Sheldon, 2006). Defining a crisis in tourism is a challenging task as there is no one single agreed-upon definition in the literature – and the definitions that appear usually are used to describe a particular crisis context (Santana, 2004). Sönmez et al (1994) affirms that a tourism crisis in general is “any occurrence which can threaten the normal operation and conduct of tourism related businesses; damage a tourist destination's overall reputation for safety, attractiveness and comfort by negatively affecting visitors' perceptions of that destination”. Examples of crises can be natural disasters, like earthquakes, tsunami or volcano eruptions.

Although there are some studies indicating the usefulness of knowledge management in a crisis situation in the tourism industry (Barišić et al, 2020; Orchiston and Higham, 2016; Racherla and Hu, 2009), it is still unclear how tourism organisations manage their knowledge during a crisis. To fill this knowledge gap, this paper is going to explore the topic in a sample tourism organisation from Poland. The case study presents managing knowledge by this kind of organisation in a crisis situation caused by COVID-19 and the war in a neighbouring country (Ukraine). This research is preliminary and exploratory in nature, as it is based on a single case-study.

This paper develops as follows. First, knowledge management in the crisis in tourism is described. Second, the methodology of the study is presented and third, the findings are described. The paper ends with the discussion section and conclusion and future research avenues.

2. KM in Crisis in Tourism

The relationship between knowledge management (KM) and crisis management has been extensively examined, with numerous studies underscoring the significance of robust KM practices in effectively handling crises (Anand et al., 2023). However, research has been diverse and somewhat scattered across various subjects of analysis, such as: military and war scenarios from the perspectives of states and peacekeeping organisations (Bolisani and Damiani, 2010), natural disasters (Dorasamy et al, 2013), medical emergencies (Wickramasinghe et al, 2006), economic crises (Ponis and Koronis, 2012), and disruptions in logistics and supply chains (Ponis and Ntalia, 2016).

Knowledge in crisis can serve as means of support in mitigating the effects of the crisis events. It may assist organisations in overcoming early challenges arising from a crisis, supporting the development of new knowledge, and facilitating the application of lessons learnt (Ng et al, 2022). Additionally, it can hinder possible damages and reinforce defence mechanisms (Kir Kuščer et al, 2021), as well as contribute to ensuring the safety of workplace and employees (Schiuma et al, 2021). Ongoing knowledge exchange, in the form of systematic updates of the tourism industry, can successfully foster organisations during the crisis response stage (Orchiston and Higham, 2016).

Knowledge management can function as an invaluable instrument, enhancing organisational resilience and fortifying their defensive strategies (Paraskevas et al, 2013), therefore creating a centralised knowledge repository (Racherla & Hu, 2009) becomes vital for tourism companies to deal with the crises effectively. Mistilis and Sheldon (2006) affirm that knowledge is needed at various stages: before, during and after a crisis. Nevertheless, while reviewing the tourism literature, it can be stated that scholars focus on selected KM processes in relation to specific crisis phases and research on KM issues in the context of overall crisis management is limited.

While the existing studies on the relationship between KM and crisis management employ varied methodologies and perspectives, there is broad agreement on two key points. Firstly, KM practices enhance learning abilities, resilience, and preparedness of organisations in managing crises (Raman and Jennex, 2010). Secondly, the success of KM in crisis management often relies on the preemptive implementation of strategic and structured approaches (Ponis and Koronis, 2012; Wang and Belardo, 2005).

This insight presents two significant challenges for tourism organisations, a sector where the link between crisis management and KM has also been investigated to a small extent (Mistilis and Sheldon, 2006; Stolarek-Muszyńska and Zieba, 2022). This sector tends to be less organised and resilient, making it vulnerable to global disruptions, as evidenced by the recent COVID-19 crisis (Kahveci, 2023; Nilsson et al, 2023). The approach to KM in these organisations is often informal, unstructured, not strategically planned, and can be described as "emergent" – typically a response to immediate problems that need solving (Zieba et al, 2016). Unfortunately, this tendency results in inefficient responses in times of crisis due to delayed reactions.

3. Methodology

The purpose of this study is to explore in-depth the role and usefulness of knowledge management during crisis situations in tourism. As this aim is strictly context-related and “the boundaries between phenomenon and context are not clearly evident” (Yin, 2003), this research adopts a case study approach.

The study addresses the following research questions:

RQ 1: To what extent does a tourism organisation apply KM processes during a crisis and whether this is a conscious and/or planned or unconscious and/or unplanned approach?

RQ 2: How aware is the decision-maker of the tourism organisation of the potential support the KM processes offer during the crisis?

RQ 3: What are the challenges related to knowledge management during the crisis?

With the view of the exploratory focus, this study is based on qualitative in-depth analysis (Creswell, 2014) and research output is presented in the form of a single case study with the organisation as the unit of analysis. Mariotto et al (2014) argues that research may benefit from the single case study approach as it provides a deep understanding of the topic that is being investigated. Primary data for this study was collected via semi-structured interview which took place in November 2023. The full interview was recorded and transcribed *verbatim* (Poland, 1995) in Polish and afterwards translated to English.

The interview was conducted with the CEO from a local tourism organisation in Poland which represents an entity within the structure of a public-private association. The organisation coordinates local marketing activities for the destination and plays a key role in the integration of the local government units and tourism industry companies from i.e., lodging sector, gastronomy, tour operator, transport, etc. As part of the subject research, a representative of the local tourism organisation operating in the metropolitan area has been chosen for in-depth analysis.

4. Findings

This section is aimed at answering the research questions based on what emerged from the analysis of the investigated case. First of all, it has to be recalled that in the last years the examined tourism organisation reported facing three relevant crises related to: the COVID pandemic, the war in Ukraine, and inflation (these are the crises the organisation faced in the opinion of the respondent). Further challenges are due to the changes in the financial structure of the local government which are affecting the amount of the local government's contribution to tourism organisations, which constitutes the majority of the organisation's budget.

According to the opinion of the organisation member, the three crises have had different impacts. In particular:

"COVID pandemic brought out good qualities in the industry, such as the willingness to cooperate, to join forces - so this was also very beneficial in terms of even local development, gaining partners, association members, and strengthening cooperation with other organisations in the POT-ROT-LOT system".

"The war in Ukraine. I would say, there was a positive aspect that we were able to test in practice the organisational efficiency of the organisation as such and the team".

"...this inflation hurts us doubly. ... our costs are rising ... running the Tourist Information, just compared to last year, they have already risen by 50%".

All summed up, in the organisation's opinion the most prominent crisis was the one caused by the war in Ukraine.

[The most significant crisis was] "the war in Ukraine because, due to the proximity of the border Tourists either postpone their visit to our city or cancel it altogether. our tourist influx is reduced".

Therefore, in what follows, the authors will mainly refer to the crisis caused by the war in the neighbouring country.

As concerns RQ1 - To what extent does a tourism organisation apply KM processes during a crisis and whether this is a conscious and/or planned or unconscious and/or unplanned approach – it must be said that the new, and unexpected conditions, forced the examined organisation to collect and process a lot of information concerning the Ukrainians-related touristic demand.

"...here we can see ... the impact of information management - by collaborating with members, such as cultural institutions, museums, hotels, restaurants, etc. Knowing that suddenly we have a lot of users of tourist infrastructure whose first and main language is Ukrainian. We really started to gather this information: how many of these people are there, and on the other hand gather information about adapting the tourist offer in Ukrainian, and also encouraging the creation of such an offer."

This was an unplanned activity, made easy for the organisation's flat structure and its strict relationships with the various stakeholders, which allowed to gather information, rapidly:

"... directly from the Ukrainian refugees ... or ... in restaurants, hotels, accommodation places, or public utility buildings that normally operate for tourists and residents, but during the crisis also provided services directly to refugees".

Summing up, the examined organisation applied some KM processes during the crisis, but they did it in a completely unconscious way, which they confirmed by stating that:

"... [KM] had absolutely no significance".

Coming to RQ 2 - How aware is the decision-maker of the tourism organisation of the potential support the KM processes offer during the crisis? – first it must be underlined that the organisation was completely unprepared to face the crisis, apart from the knowledge of Ukrainian language:

"... we were linguistically ready. We were actually able to provide services in Ukrainian ..."

In spite of this, the organisation did not change, or at least they affirm that nothing has changed in their way of doing KM:

"... it's hard to say that there were any additional actions undertaken ... it was business as usual in terms of work ... so we just continued with the team's regular schedule".

At the same time, they state that they were:

"... organizationally agile enough to quickly respond to the emerging needs ..."

and that the President of the Board was involved in communicating crucial information to the external partners.

The previous assertions further confirm that managers were involved in KM without having a clear perception of KM itself.

Concluding with RQ 3 - What are the challenges related to knowledge management during the crisis? – it was considered crucial to have all the needed information concerning the emerging new situations as soon as possible.

As concerns the activities performed by the organisation to assist refugees, and particularly the creation and managing of a helpline, they affirmed that a challenge was faced:

"... how to collaborate with NGO. If we had [such knowledge], we would have approached cooperation in a way that better protected our organisation's interests".

Effective and rapid knowledge sharing was a particularly crucial element in acting in a crisis.

"... I would say knowledge sharing [is an important KM element in crisis management]. Because in this particular crisis, our organisation had no knowledge about the reception of refugees. But possibly... more about knowledge sharing by other organisations with us, like [organisation name], [organisation name], which quickly helped us to make up for the shortcomings and effectively carry out the activities we started".

It must be underlined that cooperation was considered an effective way to face the KM related challenges raised by the crisis, and this was one of the most important lessons learnt by the organisation.

"Oh, I was saying that it gave us experience in cooperating with organisations outside the tourism industry."

Cooperation also enabled the organisation to collect and process the information needed to face the crisis. This concerned also the pandemic related crisis.

"... in the pandemic crisis, the important role of how we collected information from the industry locally was really visible. We exchanged this local-level knowledge with other organisations, and using the knowledge of these other organisations, we were able to adapt our local actions. That was very evident and very important at the time."

5. Discussion

As it can be seen on the basis of the results from the case study, some elements of knowledge management were visible in the crisis situation, although these elements were implemented rather unconsciously, meaning that the organisation did not have the awareness of the knowledge management concept itself, its elements and the usefulness of its implementation. The examined organisation has implemented elements of KM rather intuitively, responding to the needs from the environment, without planning - this kind of approach can be called "emergent approach to KM", as defined by Zieba et al (2016). It can be expected that the introduction of some basic elements of KM might constitute a base for further development - on that basis an organisation can make a reflection and draw some conclusions which can support the company in the next crisis.

It is also possible that a crisis situation is not a perfect moment for KM implementation due to various turbulences and the resources the organisation needs to appoint to deal with this crisis. It would be more advisable to implement KM earlier and adjust it to the present needs in a crisis situation (e.g., knowledge sharing with external partners indicated by the examined organisation that was implemented during the crisis). Organisations may implement some KM activities as an effect of the crisis, but during it, under the pressure, they may just implement some ad hoc activities, responding directly to the current needs.

What could be recommended for organisations dealing with crises is a self-reflection activity done after the crisis itself. Organisations could examine then what worked and what did not, as well as focus on the type of knowledge that is crucial from their perspective for crisis management. As a crisis situation is a difficult one and probably implementing changes is quite challenging then, organisations could learn afterwards and implement new solutions on the basis of lessons learnt during the crisis.

6. Conclusion and Future Research Avenues

This study endeavoured to investigate in-depth the role and usefulness of knowledge management in a tourism crisis. Two large crises, namely COVID-19 and Russian invasion on Ukraine, have proved the vulnerability of the tourism industry in Poland and clearly demonstrated that tourism organisations need to be prepared and equipped with tools and crisis knowledge in order to mitigate the impact of hazardous events, both short and long-term.

The findings from the case study point out that KM is somehow present during managing crises by tourism organisations. Even though the organisation is not aware about the knowledge management concept and the theory behind it, it can still benefit from the KM elements. Managing knowledge can be useful in the crisis (Mistilis and Sheldon, 2006), but it is vital to prepare before such hazardous events and implement KM processes earlier, as the crisis moment itself is not the best one for KM introduction due to urgent diverse organisational challenges.

This paper contributes to the body of knowledge in terms of the role and relevance of KM during the tourism crisis. It offers food for thought for researchers investigating knowledge and crisis management processes within the tourism industry. The study provides also useful insights for the practitioners from the tourism organisations sector aspiring to improve internal processes of knowledge management and thus, mitigating the future tourism crises better and easier.

As this study adopts a case study approach, it is subject to the methodology-related limitations. Research output is limited to the analysis of a single organisation and thus it does not give a comprehensive overview of the whole sector. It is also a case study from a single country, affected by two serious crises and it also limits the applicability of the results to tourism organisations from other countries.

Future research avenues may focus on expanding the initial findings from a single case-study to multiple cases in order to explore similarities or differences within the tourism industry. The subsequent research studies could entail validating the qualitative results with the use of quantitative approach. Additionally, tourism organisations from other countries could be examined, especially the ones facing similar crises (COVID-19 or other pandemic and wars in neighbouring countries). By examining tourism organisations from other countries and comparing the results, the cultural aspects of dealing with the crisis with KM support could be detected.

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References

- Anand, A., Buhagiar, K., Kozachenko, E., & Parameswar, N. (2023) "Exploring the role of knowledge management in contexts of crisis: a synthesis and way forward", *International Journal of Organizational Analysis*, 31(7), 2953-2978.
- Anand, A., Shantakumar, V. P., Muskat, B., Singh, S. K., Dumazert, J. P., & Riahi, Y. (2023) "The role of knowledge management in the tourism sector: a synthesis and way forward", *Journal of Knowledge Management*, 27(5), 1319–1342. <https://doi.org/10.1108/JKM-02-2022-0083>
- Andreeva, T., & Kianto, A. (2011) "Knowledge processes, knowledge-intensity and innovation: a moderated mediation analysis", *Journal of Knowledge Management*, 15(6), 1016–1034. <https://doi.org/10.1108/13673271111179343>



- Barišić, Anton Florijan; Rybacka Barisic, Joanna; Miloloža, Ivan (2020) "Knowledge Management Perspective in the Tourism and Hospitality Industry", In: Proceedings of the ENTRENOVA - ENTERprise REsearch INNOVation Conference, Virtual Conference, 10-12 September 2020, IRENET - Society for Advancing Innovation and Research in Economy, Zagreb, pp. 114-123,
- Bolisani, E., & Damiani, F. (2010) *Knowledge management in complex environments: the UN peacekeeping. Measuring Business Excellence*, 14(4), 76-84.
- Creswell J. W. (2014) *Research design: Qualitative, quantitative, and mixed method approaches* (4th ed.), SAGE Publications.
- Dorasamy, M., Raman, M., & Kaliannan, M. (2013) "Knowledge management systems in support of disasters management: A two decade review", *Technological Forecasting and Social Change*, 80(9), 1834-1853.
- Fong, P. S. W., & Choi, S. K. Y. (2009) "The processes of knowledge management in professional services firms in the construction industry: a critical assessment of both theory and practice", *Journal of Knowledge Management*, 13(2), 110-126. <https://doi.org/10.1108/13673270910942736>
- Junges, F. M., Gonçalves, C. R., Garrido, I. L., & Fiates, G. G. S. (2015) "Knowledge management, innovation competency and organisational performance: A study of knowledge-intensive organisations in the IT industry", *International Journal of Innovation and Learning*, 18(2), 198-221. <https://doi.org/10.1504/IJIL.2015.070867>
- Kahveci, E. (2023) "Business strategies for small-and medium-sized tourism enterprises during COVID-19: a developing country case", *Journal of Hospitality and Tourism Insights*, 6(4), 1569-1593.
- Kir Kuščer, S. E. M. P. (2021) "Tourism organizations' responses to the COVID-19 pandemic: an investigation of the lockdown period", *Current Issues in Tourism*, 25(2), 247-260.
- Mariotto, F. L., Zanni, P. P., & Moraes, G. H. S. M. D. (2014) "What is the use of a single-case study in management research?", *Revista de Administração de Empresas*, 54(4), 358-369.
- Martins, V. W. B., Rampasso, I. S., Anholon, R., Quelhas, O. L. G., & Filho, W. L. (2019) "Knowledge management in the context of sustainability: literature review and opportunities for future research", *Journal of Cleaner Production*, 229, 489-500. <https://doi.org/10.1016/j.jclepro.2019.04.354>
- Mistilis, N., & Sheldon, P. (2006) "Knowledge management for tourism crises and disasters", *Tourism Review International*, 10(1-2), 39-46.
- Nilsson, M., Ljunggren, G., & Stein, T. (2023) *Small and Medium-Sized Tourism Enterprises' Response to COVID-19: An Outlook of Business Resilience in Bali, Indonesia. Research Report*, Linnaeus University, Sweden
- Ng, D. W. L., Duarte Alonso, A., Bressan, A., and Vu, O. T. K. (2022) "Impacts, lessons learnt and envisioning the future of firms under COVID-19 – implications for knowledge management", *Journal of Knowledge Management*.
- Orchiston, C., & Higham, J. E. S. (2016) "Knowledge management and tourism recovery (de)marketing: the Christchurch earthquakes 2010-2011", *Current Issues in Tourism*, 19(1).
- Paraskevas, A., Altinay, L., McLean, J., & Cooper, C. (2013). Crisis knowledge in tourism: Types, flows and governance, *Annals of Tourism Research*, 41, 130-152.
- Poland, B. D. (1995) "Transcription Quality as an Aspect of Rigor in Qualitative Research", *Qualitative Inquiry*, 1(3), 290-310.
- Ponis, S. T., & Koronis, E. (2012) "A knowledge management process-based approach to support corporate crisis management", *Knowledge and Process Management*, 19(3), 148-159.
- Ponis, S. T., & Ntalla, A. (2016) "Crisis management practices and approaches: Insights from major supply chain crises", *Procedia Economics and Finance*, 39, 668-673.
- Racherla, P., & Hu, C. (2009) "A framework for knowledge-based crisis management in the hospitality and tourism industry", *Cornell Hospitality Quarterly*, 50(4), 561-577.
- Raman, M., & Jennex, M. (2010) "Knowledge management systems for emergency preparedness: The way forward", *Journal of Information Technology Case and Application Research*, 12(3), 1-11.
- Schiama, G., Jackson, T., and Lönnqvist, A. (2021) "Managing knowledge to navigate the coronavirus crisis", *Knowledge Management Research & Practice*, 19(4), 409-414.
- Santana, G. (2004) "Crisis management and tourism: Beyond the rhetoric", *Journal of Travel and Tourism Marketing*, 15(4), 299-321. https://doi.org/10.1300/J073v15n04_05.
- Sönmez, S. F., Backman, S. J., and Allen, L. (1994) *Managing tourism crises: A guidebook*, Department of Parks, Recreation and Tourism Management, Clemson University.
- Stolarek-Muszyńska, E., & Zieba, M. (2022) "Knowledge Management for Managing Crisis in Tourism: Theoretical insights", In: European Conference on Knowledge Management (Vol. 23, No. 2, pp. 119-1157).
- Vaccaro, A., Parente, R., & Veloso, F. M. (2010) "Knowledge Management Tools, Inter-Organizational Relationships, Innovation and Firm Performance", *Technological Forecasting and Social Change*, 77(7), 1076-1089. <https://doi.org/10.1016/j.techfore.2010.02.006>
- Wang W-T and Belardo S. (2005) "Strategic Integration: A Knowledge Management Approach to Crisis Management," Proceedings of the 38th Annual Hawaii International Conference on System Sciences, Big Island, HI, USA, pp. 252a-252a, doi: 10.1109/HICSS.2005.559.
- Wickramasinghe N., Bali R.K. and Naguib R.N.G. (2006) "Application of Knowledge Management and the Intelligence Continuum for Medical Emergencies and Disaster Scenarios," International Conference of the IEEE Engineering in Medicine and Biology Society, New York, pp. 5149-5152, doi: 10.1109/IEMBS.2006.260825.
- Yin, R. K. (2003) *Case Study Research: Design and Methods*, SAGE Publications.
- Zieba, M. (2021). *Understanding Knowledge-Intensive Business Services*, Springer International Publishing.

Zieba, M., Bolisani, E., & Scarso, E. (2016) "Emergent approach to knowledge management by small companies: multiple case-study research", *Journal of Knowledge Management*, 20(2), 292-307.