

**SECTION:** MANAGEMENT.

**SEKCJA:** KIEROWNICTWO.

**How to cite:** Francisco Fernando, R. R. (2024). Knowledge Management Systems in SMEs of the Portuguese Touristic Sector. *International Conference on Science, Innovations and Global Solutions*. (pp. 404-408). Futurity Research Publishing. <https://futuraity-publishing.com/international-conference-on-science-innovations-and-global-solutions-archive/>

## **Knowledge Management Systems in SMEs of the Portuguese Touristic Sector**

**Ribeiro Ramos, Francisco Fernando**<sup>1</sup>

<sup>1</sup>*PhD in Business, Marketing Professor, Coimbra Business School-ISCAC-IPC, Portugal*

**Accepted:** July 22, 2024 | **Published:** July 31, 2024 | **Language:** English

**Abstract:** This study explores the implementation and impact of Knowledge Management Systems (KMS) within Small and Medium-sized Enterprises (SMEs) in Portugal's tourism sector. As a vital component of organizational strategy, KMS facilitate the effective handling, sharing, and utilization of knowledge resources, which are crucial for maintaining competitive advantage and enhancing service quality. Despite the recognized potential benefits, the adoption of KMS in Portuguese tourism SMEs faces several challenges, including limited financial resources, lack of technical expertise, and cultural resistance to change. Through a mixed-methods approach comprising surveys and case studies, this research identifies the key drivers and barriers to KMS adoption and evaluates their influence on organizational performance. Findings suggest that SMEs with robust KMS experience improved operational efficiency, innovation, and customer satisfaction. However, successful implementation requires tailored strategies that address specific contextual factors, such as the unique characteristics of the tourism sector and the inherent constraints of SMEs. The study concludes with practical recommendations for policymakers and business leaders to support the integration of KMS, fostering a more resilient and dynamic tourism industry in Portugal.

**Keywords:** Knowledge Management Systems (KMS), SMEs, Portuguese tourism sector, Organizational strategy, Case studies

## Introduction

The tourism industry is a critical component of Portugal's economy, contributing significantly to GDP and employment. SMEs dominate this sector, providing diverse services that cater to both international and domestic tourists. In such a dynamic and competitive environment, effective knowledge management becomes essential for sustaining growth and ensuring service quality. Knowledge Management Systems (KMS) offer a structured approach to capturing, sharing, and utilizing knowledge within organizations, leading to enhanced decision-making, innovation, and customer satisfaction.

Knowledge Management Systems (KMS) have emerged as a vital tool for businesses across various sectors, enabling them to leverage their collective knowledge for improved decision-making, innovation, and competitive advantage (Grant, 1996; Alavi and Leidner, 2001). In the context of the tourism sector in Portugal, small and medium-sized enterprises (SMEs) play a crucial role. These enterprises, often characterized by limited resources and flexibility, are central to the vibrancy and competitiveness of Portugal's tourism industry. This article explores the implementation and impact of KMS within Portuguese tourism SMEs, highlighting their potential to enhance operational efficiency, service quality, and overall business performance.

Recent studies on KMS emphasize their importance in creating a structured approach to managing organizational knowledge. According to Nonaka and Takeuchi's SECI model (Socialization, Externalization, Combination, and Internalization), KMS facilitate the transformation of tacit knowledge into explicit knowledge and vice versa, fostering a culture of continuous learning and innovation (Nonaka and Takeuchi, 1995; Wiig, 1997; Hansen et al., 1999; Zack, 1999; Serenko and Bontis, 2016).

In the tourism sector, research by Buhalis and Law (2008) indicates that information and communication technology (ICT), including KMS, significantly impact service delivery and customer satisfaction. Their study highlights that effective knowledge management can lead to more personalized and high-quality tourism experiences.

Moreover, a study by Fadaei et al. (2020) focused on SMEs suggests that while larger enterprises have widely adopted KMS, SMEs face unique challenges such as limited financial resources, lack of technical expertise, and resistance to change. These barriers often hinder the successful implementation of KMS in smaller businesses.

Recent research by Nonaka and Takeuchi (1995) underscores the value of tacit knowledge, which is particularly relevant in service-oriented industries like tourism. Additionally, Davenport and Prusak (1998) emphasize the need for a strategic approach to KM, integrating it into the core business processes.

In the Portuguese context, Carvalho et al. (2016) investigate the KM practices among tourism SMEs and identify a significant gap in the formal adoption of KMS, primarily due to financial and technical constraints. Another study by Sousa and Rocha (2019) highlights the role of organizational culture in shaping KM practices, noting that a collaborative culture fosters better knowledge sharing and utilization.

In Portugal, the tourism sector's unique characteristics necessitate a tailored approach to KMS adoption. Research by Silva et al. (2021) indicates that Portuguese tourism SMEs can benefit significantly from KMS by improving their adaptability and responsiveness to market changes. However, the study also points out the need for supportive policies and training programs to overcome the existing barriers to KMS adoption.

The purpose of this article is to analyze the current state of KMS adoption in Portuguese tourism SMEs, identify the key challenges and benefits associated with their implementation, and provide practical recommendations for business leaders and policymakers. By doing so, the article aims to contribute to

the enhancement of knowledge management practices in the tourism sector, fostering a more dynamic and competitive industry in Portugal.

## Main Results

### 1. The Role of KMS in SMEs

Knowledge Management Systems are designed to capture, store, and disseminate knowledge within an organization. For SMEs, particularly in the tourism sector, KMS can offer numerous advantages:

- Enhanced Decision-Making: By providing access to accurate and timely information, KMS enable managers to make informed decisions.
- Improved Efficiency: Streamlined processes and better coordination of activities result from effective knowledge management.
- Innovation: KMS foster a culture of innovation by facilitating the sharing of ideas and best practices.
- Customer Satisfaction: By leveraging customer insights and feedback, SMEs can offer more personalized and high-quality services.

### 2. Challenges to KMS Adoption in Portuguese Tourism SMEs

Despite the potential benefits, several challenges impede the adoption of KMS in Portuguese tourism SMEs:

- Financial Constraints: Limited budgets restrict the ability of SMEs to invest in sophisticated KMS solutions.
- Technical Expertise: A lack of technical skills and knowledge about KMS can hinder implementation.
- Cultural Resistance: Employees and management may resist changes in established workflows and practices.
- Scalability: KMS solutions often need customization to fit the specific needs of SMEs, which can be resource-intensive.

### 3. Strategies for Effective KMS Implementation

To overcome these challenges, Portuguese tourism SMEs can adopt several strategies:

- Tailored Solutions: Implementing scalable KMS solutions that align with the specific needs and resources of SMEs.
- Training Programs: Investing in training for employees to enhance their technical skills and understanding of KMS.
- Change Management: Developing a change management strategy to address cultural resistance and promote the benefits of KMS.
- Government Support: Advocating for supportive policies and incentives from the government to facilitate KMS adoption.

## 4. Research Results

### Drivers of KMS Adoption

The adoption of KMS in tourism SMEs is driven by several factors. Firstly, the need to enhance operational efficiency and streamline processes is a significant motivator. KMS facilitate better coordination and communication within organizations, leading to improved productivity. Secondly, the competitive nature of the tourism industry necessitates continuous innovation, and KMS provide a platform for sharing best practices and fostering creative solutions. Lastly, customer satisfaction is a critical success factor, and KMS enable businesses to better understand and respond to customer needs through data-driven insights.

### Barriers to KMS Adoption

Despite the clear benefits, several challenges impede the widespread adoption of KMS in Portuguese tourism SMEs. Financial constraints are a primary barrier, as many SMEs operate on limited budgets and cannot afford sophisticated KMS solutions. Technical expertise is another critical issue; many SMEs lack the necessary skills to implement and maintain KMS effectively. Additionally, cultural resistance to change can hinder the adoption of new technologies and processes. As highlighted by Sousa and Rocha (2019), fostering a collaborative culture is essential for successful KM practices.

## 5. Case Studies

Examining successful case studies of KMS implementation in Portuguese tourism SMEs can provide valuable insights. For instance, a small family-owned hotel in Lisbon implemented a basic KMS to streamline its booking and customer service processes. The system facilitated better information sharing among staff, resulting in improved customer satisfaction and operational efficiency. Conversely, a travel agency in Porto faced significant challenges in adopting a KMS due to limited financial resources and technical expertise. Despite these hurdles, the agency experienced modest improvements in process coordination and customer engagement.

## Conclusions

The adoption of Knowledge Management Systems in Portuguese tourism SMEs holds significant potential for enhancing business performance and competitiveness. While challenges such as financial constraints, lack of technical expertise, and cultural resistance exist, they can be addressed through tailored strategies and supportive policies. Successful KMS implementation can lead to improved decision-making, efficiency, innovation, and customer satisfaction. By fostering a culture of continuous learning and knowledge sharing, Portuguese tourism SMEs can better navigate the dynamic market environment and contribute to the overall growth and sustainability of the tourism sector.

## References

- Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107-136.
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. *Tourism Management*, 29(4), 609-623.
- Carvalho, J., Santos, G., & Gonçalves, R. (2016). Knowledge management practices in tourism SMEs: Evidence from Portugal. *Journal of Knowledge Management*, 20(5), 908-927.
- Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Harvard Business School Press.

- Fadaei, M., Fatemi, H., & Omid Najafabadi, H. (2020). Knowledge management in SMEs: A systematic review of the literature. *Journal of Knowledge Management*, 24(1), 89-116.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109-122.
- Hansen, M. T., Nohria, N., & Tierney, T. (1999). What's your strategy for managing knowledge? *Harvard Business Review*, 77(2), 106-116.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press.
- Serenko, A., & Bontis, N. (2016). Understanding counterproductive knowledge behavior: Antecedents and consequences of intra-organizational knowledge hiding. *Journal of Knowledge Management*, 20(6), 1193-1210.
- Silva, M., Gonçalves, A., & Ferreira, J. (2021). Knowledge management in Portuguese tourism SMEs: Barriers and facilitators. *International Journal of Tourism Research*, 23(2), 245-258.
- Sousa, M. J., & Rocha, Á. (2019). Organizational culture and knowledge management in tourism: An empirical study in Portugal. *Journal of Tourism Research*, 18(3), 345-360.
- Wiig, K. M. (1997). Knowledge management: An introduction and perspective. *Journal of Knowledge Management*, 1(1), 6-14.
- Zack, M. H. (1999). Developing a knowledge strategy. *California Management Review*, 41(3), 125-145.