



Hakutaku - TCC



1. Project Members

Names
Patrick Victorino Miranda
Raduan Oliveira Galli Muarrek
Vinicios Venancio Lugli
Rodrigo Campos Rodrigues
Pedro de Carvalho Rezende

2. Definition of the problem to be solved

2.1 Introduction:

Knowledge management is characterized as the process of capturing, organizing, sharing, and utilizing knowledge within an organization. There are two types of knowledge: tacit and explicit. According to Nonaka et al. (2000), "Explicit knowledge



can be expressed in a formal and systematic language; it can be shared in data, scientific formulas, specifications, and manuals; it can be processed, transmitted, and stored easily. Tacit knowledge is highly personal and difficult to formalize."

An effective knowledge management approach encompasses both types, aiming to make them easily accessible within a company and intuitive to be consumed. However, there is often no efficient management in this regard. Frequently, for example, HR departments develop internal management systems or opt to acquire specialized knowledge management software for their specific needs. However, due to the closed nature and outdated design of most of these software solutions, knowledge is unable to be shared between the different departments of the organization. Artificial intelligence, on the other hand, has the ability to extend across multiple areas, gradually enabling the creation of knowledge management software that meets the needs of various departments within a company. This facilitates the use of knowledge generated not only within a single department but across the entire organization. Despite these advantages, senior leadership still faces challenges in implementing this technology effectively.

2.2 Problem Development:

The problem we are addressing is knowledge management, which is characterized by the strategy and practice of managing all the content and data generated by the company in recent years.

In practice, this issue requires considerable discipline and organization. It involves



everything from creating useful information for the company to storing, managing, and controlling access to it. Consequently, most companies face difficulties, especially in:

- I. Organizing their documents and knowledge;
- II. Creating new documents that effectively record data and knowledge;
- III. Sharing information between departments;
- IV. Unifying knowledge into a single platform;
- V. Establishing a robust document search system.

These challenges lead to problems such as:

- Operational inefficiency, as employees may spend hours searching for the same information;
- II. **Succession issues**, where employees who leave take tacit knowledge with them:
- III. **Lengthy onboarding processes** that require the time of multiple workers to clarify questions that could be answered with proper documentation and organization;
- IV. **Data fragmentation issues**, leading to extensive searches across multiple platforms to find desired information, which is not only inconvenient but also generates additional costs with platform maintenance.

From a financial perspective, these issues create significant problems for companies.

Reduced efficiency means more time is needed to complete a task. Succession and onboarding problems ultimately relate to the same efficiency issue, as new



employees need to interrupt the experienced team, occupying the time of both parties.

In addition to these financial concerns, effective knowledge management generates less tangible but equally valuable benefits: leveraging the knowledge acquired over the years to enhance daily activities and problem-solving. For example, if a consultancy has already conducted a go-to-market project, the ideal is to review both the macro and micro aspects of the previous project to improve future implementations. This allows the company to continuously learn from the information generated by past experiences.

2.3 Data/Comprovation:

To validate the existence of this issue, market research, field data collection, and participation in competitions were conducted, which provided significant insights and validations regarding the relevance of the problem.

Market Research:

According to a survey conducted by Notion for the 6th episode of their webinar (2024), 97% of leaders recognize the importance of knowledge management, but only 44% believe their organizations execute it effectively. This data highlights the gap between the perception of the topic's relevance and its practical application within companies.

Competitions and Hackathons:



- I. Stark Bank Hackathon → We participated in the Stark Bank hackathon, which focused on using Al in the financial market. During the event, the concept of Hakutaku was proposed, receiving praise from the internal team. The main issue identified was "disorganization within the company," which is common in startups experiencing rapid growth. Although it did not win the top prize, the feedback provided clear validation of the relevance of the problem.
- II. Bemobi Hackathon → In this hackathon, Hakutaku was presented with characteristics and functionalities similar to those it currently has. The project was awarded first place, reinforcing the acceptance and consistency of the proposed solution.

Validation with Companies:

- III. Farmoquímica SA → In conversations with a trade marketing analyst, it was reported that finding information within the company is challenging.
 Employees often have to ask on Microsoft Teams to find someone who can help. This situation illustrates how Hakutaku could address knowledge access issues.
- IV. Vault → In discussions with Vault's CTO, onboarding issues were highlighted, where new employees spend time on unproductive tasks, delaying their activities and those of other team members. This case emphasizes the direct impact of operational inefficiency.



V. Mavericks → Mavericks' CFO mentioned succession problems, both in the current company and at Citi (where they previously worked). This underscores the issue of tacit knowledge loss when employees leave the organization.

These practical examples and quantitative data confirm that knowledge management challenges are widely recognized and experienced across different organizational contexts.

2.4 Conclusion:

Knowledge management, despite its recognized importance, remains a significant challenge for various organizations. Issues related to information organization, communication between departments, and retention of tacit knowledge are widely documented, as shown in the market research and validations conducted.

The data presented in section 2.3 corroborates the relevance and urgency of this issue. The gap between leaders' perceptions (97% recognize the importance) and effective execution (only 44% implement it correctly) highlights the existing disparity. Moreover, the validations obtained through hackathons and real-world companies strengthened the understanding that solutions like Hakutaku can address practical problems such as operational inefficiency, onboarding of new employees, and succession.

Therefore, it is evident that knowledge management is not just a theoretical problem but a practical and pressing need in the market. The implementation of technologies



using artificial intelligence, combined with intuitive and accessible design, is a promising approach to addressing these challenges in information management, transforming the way organizations capture, store, and share internal knowledge.

Sources:

- Notion Episode 6: Supercharging company knowledge with Al. Available at:
 https://info.notion.so/webinar/webinars-amer/notions--episode-6-the-future
 -of-organisational-knowledge. Accessed on: Mar 1, 2025.
- POPADIUK, S.; SANTOS, A. E. M. DOS. Tacit, Explicit, and Cultural Knowledge in Demand Planning. *JISTEM Journal of Information Systems and Technology Management*, v. 7, n. 1, p. 207–226, Apr 30, 2010.
- CHATGPT. Writing and Text Review Assistant. OpenAl, 2025. Tool used for spelling corrections and textual coherence in the development of project documentation.