

Silent Knowledge plays a crucial role in successful operations.

SILENT KNOWLEDGE

→ CAPTURE IT!



iQVet

D2.2

It is practical - based on experience - and gained by exercises and training.



Co-funded by the
Erasmus+ Programme
of the European Union

The European Commission support for the production of this publication does not constitute endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

CAPTURING SILENT KNOWLEDGE

Silent knowledge refers to a kind of knowledge that is difficult to articulate or document. It includes insights, intuitions, and skills gained through personal experience and practice. Unlike explicit knowledge, which can be easily communicated through written or spoken words, silent knowledge is often embedded in an individual's actions, routines, and experiences. This type of knowledge is typically acquired through hands-on experiences and is often challenging to transfer or share with others without direct interactions or observations

The share of people aged 55 years or more in the total number of persons employed in the EU-27 countries increased from 12 % to 20 % between 2004 and 2019. Manufacturing firms are both aware and concerned about the aging of their manufacturing workforce, and they are particularly concerned about the brain drain targeting the loss of institutional- and technical knowledge. Companies are taking steps to mitigate the effect of the aging workforce in their manufacturing sectors by capitalizing on the talents and experiences of their elderly staff.

However, capturing silent knowledge is often challenging due to its inherent nature of being unspoken and experimental. Fortunately, several strategies can help in documenting and sharing this type of knowledge effectively. Such a structured approach helps in uncovering the unspoken knowledge that employees use, offering insights into how it can be effectively captured and shared.





Operational expertise:

Skilled technicians and engineers acquire an intuitive understanding of machinery operation, maintenance, and troubleshooting that go beyond written manuals. Experienced staff develops methods for optimizing production processes based on their hands-on experiences.

Conducting interviews and conversations:

Conducting interviews addressing silent knowledge involve exploring how individuals use their implicit understanding and experiences in their work. This can be used to engage in detailed conversations with experienced production staff. Use open-ended questions to uncover their insights, experiences, and problem-solving approaches. Then record these discussions to analyze and extract the valuable information.

A semi structured interview to capture the silent knowledge:

- Introduction
 - Explain the goal of the interview to understand and capture the silent knowledge that employees use in their roles in the organization.
- Background information
 - Can you briefly describe your current role and responsibilities?
 - How long have you been in this position, and which previous experiences contribute to your expertise?
- Daily task at job and decision making
 - What are some of the routine tasks you handle regularly?
 - How do you approach these tasks, and what are the key factors you consider?
 - Can you describe a recent situation where you had to make a critical decision?
 - What factors influenced your decision, and how did your past experiences play a role?
- Problem solving leading to insight
 - What are some common challenges you face in your role?
 - How do you typically address these challenges? Can you provide an example?
 - Are there any aspects of your work where you rely on intuition or experience, rather than formal procedures?
 - How did you develop this intuitive understanding?
- Knowledge sharing
 - Have you ever mentored or been mentored by someone? How did this experience help you in understanding or transferring silent knowledge?
 - How do you share your expertise with others in your team?
 - Are there any areas where you feel your silent knowledge is not adequately captured or shared within the team?
 - What would be the most effective way to document or communicate this silent knowledge to others?
- Recommendations
 - What do you consider to be the most valuable piece of silent knowledge you have gained through your work experience?
 - How do you think this silent knowledge could benefit others in the organization?
 - Do you have any suggestions for improving the way silent knowledge is captured and shared within your organization?
- Final thoughts
 - Is there anything else you would like to share about your experiences or silent knowledge that we haven't covered?



Silent knowledge sample interview questions:

1. Can you describe a specific instance where your experience and silent knowledge guided you in solving a complex problem?
2. What are some unwritten rules or best practices you follow in your role?
3. How do you usually approach tasks that do not have a clear procedure or guideline?
4. In what ways do you think your silent knowledge could be better documented or shared with others?
5. How do you think new team members could benefit from understanding your silent knowledge expertise?

Safety issues:

Safety practices often evolve from personal experience and collective wisdom. Staff develop informal strategies for dealing with hazardous situations or navigating safety protocols that are not explicitly detailed in training materials. Knowledge of potential risks and how to mitigate them, often comes from practical experience rather than theoretical knowledge, helping to prevent accidents and ensure a safe working environment.

Mentoring expertise:

When students ask questions or seek clarification, it prompts the mentor to articulate their thought processes and reasoning, transforming silent knowledge into explicit forms. This transparency boosts the students confidence and deepens their understanding of the aspects of the job.

Using mentorships and job shadowing:

Try to implement mentorship programs where experienced employees guide less experienced ones. By observing and shadowing these experts during their daily tasks, helps capturing their intuitive problem-solving techniques and workflows. Mentorship and silent knowledge are strongly interconnected, since mentorship offers a powerful means to convey unspoken, experience-driven insights that are often challenging to document or teach through formal methods.

Facilitating the transfer of silent knowledge through mentorship:

- Learning through observation and experience
 - In mentorship, students frequently observe their mentor's decision-making, problem-solving strategies and work routines. Through this hands-on exposure, students absorb the silent knowledge by observing real-life applications and practical examples. For example, a mentor showcase how they manage complex customer interactions or resolve unforeseen issues with skills that are often gained through experience, and rarely captured in manuals.
- Contextual Learning
 - Silent knowledge is often tied to specific contexts, such as grasping company culture, unwritten rules, or handling unique challenges. Mentorship allows students to learn these nuances in real-world settings, as mentors share insights that are directly linked to particular situations.
- Personalized Guidance
 - Mentors can customize their guidance to fit each single students` unique need, offering access to knowledge that may not be universally relevant but is essential for specific roles or environments. This personalized approach enables the transfer of knowledge that doesn't fit into a standard, one-size-fits-all training model.
- Building Confidence Through Trust
 - In a trusted mentorship, mentors can openly share silent knowledge that might not surface in formal settings, such as lessons from past failures or efficiency-boosting shortcuts. This transparency boosts the students confidence and deepens their understanding of the more subtle, behind-the-scenes aspects of the work.
- Active Engagement
 - Mentorship fosters active engagement and dialogue, often bringing to the light silent knowledge the mentor may not even be aware they possess. When students ask questions or seek clarification, it prompts the mentor to articulate their thought processes and reasoning, transforming implicit silent knowledge into more explicit forms.
- Feedback and Reflection
 - Mentors offer ongoing feedback, helping students to refine their approach by drawing on the mentor's silent knowledge. This feedback loop allows students to gradually incorporate this valuable insight into their own practices.

Job shadowing:

Gain insight in the paths that professionals followed to reach their careers. Learn about the structure of their work, daily routines, and the motivations that drive them to continue their work on a daily basis. Create relationships and build professional networks that are one of the most underutilized job search tools.

Silent knowledge transfers examples by applying mentorships:

Mentorship is one of the most effective ways to transfer silent knowledge, as it provides personalized, experience-based interaction necessary to make silent knowledge insights accessible to others.

A prime example is the apprentice system, where apprentices in many trades learn by observing and practicing alongside their mentors. Over time, they absorb the master craftsman's refined techniques, including the precise use of tools, timing, and instinctive adjustments, developing their expertise through practical, hands-on experience.

Another example is corporate leadership development, where senior leaders frequently mentor rising leaders, offering valuable insights on managing complex negotiations, navigating office dynamics, and making high-stakes decisions. These lessons are shaped by years of experience and are difficult to convey through standard training programs.

Immersing students in a professional environment can be a truly eye-opening experience. It can give students a clear understanding of what truly happens in the field they're interested in. Thus, job shadowing offers invaluable insight into what a professional person actually does on the job, their level of responsibility, and the inner workings of the industry from a first-hand perspective. This is why it's considered such a highly beneficial experience. It serves as one of the simplest and most effective ways to get a firsthand "preview" of the professional world.

It's remarkable how many students entering unfamiliar fields take courses, read books, and attend lectures, only to struggle later. They lack a method for learning directly from experienced professionals. The key to effective observation is to ask targeted questions about the professional activities and behavior they are witnessing. This is in addition an opportunity to build relationships with experienced professionals who can help the students make informed career decisions and provide job leads after graduation. Job shadowing is an effective way to understand the duties and responsibilities of a specific job and explore the career path the students are interested in.

Thus, job shadowing becomes a learning process where a student observes and follows a more experienced professional in their job role to gain insight into the day-to-day tasks, workflows, and nuances of the job. It allows the shadowing individual student to pick up silent knowledge by closely observing how experienced professionals apply their skills in real-world scenarios. This refers to the deep, often unspoken understanding and skills that professional workers acquire through experience, rather than formal instruction. Such type of knowledge is typically passed on through observation, practice, and imitation.



Best practices for mentors to capture silent knowledge?

1. Create Opportunities for Shadowing: Allow students to shadow mentors during their daily tasks to observe and absorb their practices.
2. Encourage Open Dialogue: Facilitate regular check-ins where students can ask questions, and mentors can explain their reasoning and the decision-making processes.
3. Foster reflective practice: Mentors should encourage the students to reflect on their experiences, identifying key lessons and silent knowledge they have absorbed.
4. Promote Knowledge Sharing: Students should be encouraged to share their learning with others, helping to distribute the silent knowledge across the team or organization.

Mentorship issues and the apprentice model system:

In many trades, apprentices learn by observing and practicing alongside their mentors. Over time, they absorb the master craftsman's subtle techniques – such as the precise feel of a tool, timing and intuitive adjustments – gaining expertise through hands-on experiences.

Documenting best practices and experiences:

Specific context

Silent knowledge is frequently linked to specific contexts, such as understanding company culture, unwritten rules, or managing unique challenges. Students gain exposure to these nuances in real-life situations, as mentors share insights that are closely connected to the circumstances.

A good starting point is to encourage employees to document their experiences, challenges, and solutions. This can be done through regular reflection sessions, where they write down and/or discuss their insights and approaches.

Documenting best practices and experiences that encompass silent knowledge requires a structured approach to capture insights that are often unspoken and based on personal experience. Here are examples on effective methods to document such silent knowledge skills and competences:

Structure of silent knowledge best practices and experiences

Identify key areas of silent knowledge:

- Focus on crucial roles and tasks: Concentrate on roles or tasks where silent knowledge is particularly valuable, such as troubleshooting, decision-making, or quality assurance.
- Observe informal techniques: Take note of the informal methods experienced employees use, including their intuitive problem-solving approaches and adaptive strategies in day-to-day operations.

Facilitate conversations:

- Interview experienced staff: Encourage employees to share specific examples of how they manage difficult situations or make complex decisions that fall outside standard procedures.
- Ask open-ended questions: Invite the staff to explain their thought processes, decision-making strategies, and techniques they have developed through experience.
- Encourage deeper insights by using prompts like: "How would you approach this differently from the formal procedure?" or "What do you do when things don't go as planned?" to draw out valuable insights.

Facilitate knowledge sharing workshops:

- Organize group sessions: Hold workshops or meetings where employees can exchange their experiences and share best practices with their peers.
- Document key insights: Record the discussions and capture important insights, particularly silent knowledge related to handling unique situations or improving processes.
- Promote storytelling: Encourage employees to share real-life examples as a way to articulate their silent knowledge and pass on valuable lessons.

Incorporate mentorship programs:

- Facilitate silent knowledge transfer: Leverage mentorship programs to pass on silent knowledge. Students can assist in documenting their mentor's techniques and best practices, helping to bridge the gap between hands-on experience and formal documentation.

Encourage reflection and self-documentation to capture and understand silent knowledge:

- Promote self-reflection: Encourage employees to regularly reflect on their work and document any insights, improvements, or shortcuts they've discovered through their experiences.
- Maintain experience logs: Ask employees to keep logs that record instances where they had to adapt formal procedures and detail how they successfully handled those challenges.

This involves prompting students to think critically about their experiences and record their observations. This process helps them make sense of their silent knowledge with unspoken skills and insights gained through experience, by reflecting on what they've learned and documenting their understanding. This approach aids students in solidifying their knowledge and can be valuable for personal growth and skill development.

Template for documentation of silent knowledge best practices:

1. **Title/Task:** Example: Managing Unexpected Production Machinery Failures
2. **Task Overview:** Provide a summary of the formal procedure or task as described in official guidelines or documentation.
3. **Challenges and Adaptations:** Highlight typical challenges not addressed in the formal procedure, and describe the adjustments employees make based on their hands-on experience.
4. **Best Practices:** Outline the best practices that have emerged over time, including specific techniques, tools, or expert tips from seasoned employees.
5. **Decision-Making Process:** Detail the reasoning behind particular decisions or actions that may differ from the formal procedure, based on real-world experience.
6. **Lessons Learned:** Record important lessons learned through trial and error, contributing to the body of silent knowledge within the task.
7. **Visual Aids/Diagrams:** Incorporate diagrams, flowcharts, or images to help visualize complex tasks or procedural adjustments.
8. **Additional Notes and Tips:** Offer further tips or insights from employees, providing context on why certain actions are taken in specific situations.

By applying these methods, silent knowledge can be effectively captured and documented, ensuring that valuable experience-based insights are preserved and readily accessible to others within the organization.

