Share That Knowledge!

A Road Map for Sharing Knowledge across Generations of Audiovisual Archivists

Janneke van Dalen, Nadja Šičarov

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Acknowledgements

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Introduction

When we started working in our respective workplaces, the Austrian Film Museum (Österreichisches Filmmuseum) and the Slovenian Cinematheque (Slovenska kinoteka), we were astonished by the breadth of knowledge our senior colleagues had about the collections they worked with: The mention of a film title would conjure up all sorts of stories and facts about the film elements of that title found in the collection. As we observed them working with film materials and equipment and moving around the collection building, we noticed how intuitively they applied their expertise. Whenever we asked them a technical question which they could not answer, they would instead immediately call a (in most cases, retired) engineer whose phone number they had at hand. This got us wondering: How can we learn from them? How can they share their valuable knowledge and contacts gained through years of practice and experience? At the same time, we were also struggling with our own views and perspectives on work, which were at odds with those of our senior colleagues. After a while, we found that some of the things we learned in our audiovisual preservation studies were often not put into practice. More questions cropped up: How can we bring in "new" knowledge and learn from our senior colleagues at the same time? How can we facilitate the exchange of knowledge between different generations of audiovisual archivists?

At the symposium organized by the International Federation of Film Archives (FIAF) in Prague in April 2018, we presented our concerns and personal observations and discussed the topic of knowledge sharing with colleagues from other film archives. We came to realize that, although archives usually develop their own methods of knowledge transfer, these methods may not be suitable for sharing the different kinds of knowledge audiovisual archivists possess. Consequently, this could result in a loss of essential knowledge that is needed to preserve collections. In addition, we discovered that these methods have not been widely articulated or systematically

shared through published research. The lack of collective effort to discuss this important but largely unexplored topic motivated the Austrian Film Museum and the Slovenian Cinematheque to initiate the research project *Share That Knowledge! Finding Strategies for Passing on Knowledge across Generations of Audiovisual Archivists.* Lasting from 2019 to 2023, the project was supported by the Austrian Federal Ministry for Arts, Culture, Civil Service and Sport and endorsed by FIAF. The research project culminated in this book.

Researching practices of knowledge sharing

→ 1 See Galán-Pérez, et al., *Fostering cooperation in the European Union on skills, training and knowledge transfer in cultural heritage professions*; Kuhnert, *Stelleninhaber geht – Wissen bleibt!: Wissensmanagement am Beispiel der Universitätsbibliothek Freiberg*; Leeuwen, *Help mijn collega vertrekt?! Toolbox voor erfgoedorganisaties*; Welsh Government, *Museums, archives and libraries: succession planning. Templates and guidance for museums, archives and libraries to manage staff changes*; Weggeman, *Kennismanagement: de praktijk*; Vugts and Sluis, *Onderzoeksverslag Specialistische kennisborging in de museale sector.*

Our research focused on identifying knowledge at risk, challenges encountered in sharing this knowledge, and methods already practised within audiovisual archives. In preparing this project, we were inspired by studies in related fields such as museum studies and library science, which include published research on succession management techniques and knowledge sharing among colleagues.[1] However, we felt it was essential to examine our specific field, audiovisual archiving, which combines a number of different disciplines and practices. Audiovisual archiving institutions identify as museums, libraries, cinemas, archives, or a combination of all these. The field of audiovisual archiving has a unique and relatively young history drawing from these many disciplines, which naturally affects the complexity of knowledge that professionals in this field possess. This knowledge can range from film and media history, material handling, cataloguing, restoration and curating to vault management. In addition, audiovisual archivists work with audiovisual materials and related collections with varying histories, created and preserved at different stages of technological development. It is therefore necessary to identify the various interrelated aspects of the knowledge held by audiovisual archivists as well as the scenarios in which knowledge sharing might be of particular significance.

To get an idea of the state of knowledge sharing in the field of audiovisual preservation and identify the knowledge at risk, as well as the challenges and methods already in place, we reached out to the worldwide community of audiovisual archivists with a survey. The results of this survey confirmed that our initial questions and concerns resonated with colleagues in the broader field of audiovisual archiving, also providing us with a sense of direction and a focus for the qualitative research study that would become the core method of our research.

Because this topic had not been previously researched in our field, we decided on conducting grounded theory research, focusing on real-life examples, and examining actual working practices in the field using qualitative research methods. We formed a working group of archive affiliates who would help us in this research; colleagues representing thirteen audiovisual archiving institutions from around the world, all from different backgrounds, generations, and cultural contexts: Academic Film Centre – Student City Cultural Centre (Akademski Filmski Centar – Dom kulture "Studentski grad," Serbia), British Film Institute (United Kingdom), Cinémathèque québécoise (Canada), National Cinematheque of Mexico (Cineteca Nacional de México, Mexico), Imperial War Museum (United Kingdom), J.H. Kwabena Nketia Archives at the University of Ghana (Ghana), Library and Archives Canada (Canada), National Film Archive (Národní filmový archiv, Czech Republic), National Film and Sound Archive (Australia), Netherlands Institute for Sound & Vision (Nederlands Instituut voor Beeld & Geluid, Netherlands), and Thai Film Archive (Thailand).

The data we collected consisted of interviews conducted by (1) colleagues from the archive affiliates working group with their own colleagues in their respective archives, (2) working group participants with other working group participants from other institutions, and (3) ourselves with those colleagues who had responded to our survey with methods and ideas for knowledge sharing. We set out to uncover knowledge sharing patterns by asking open-ended questions about our colleagues' professional lives and their learning and knowledge sharing experience. As an analysis of a total of 86 interviews, two reports of conversations that took place during workshops we organized, and three email conversations, the data represent the experiences and perspectives of 91 colleagues from a total of 25 different audiovisual archives. The participants are directors, collection managers, digitization technicians, technical archivists, restorers, curators, audiovisual archivists, audio technicians, and film archivists. The audiovisual archives they represent vary in both kind and size. They include national and private archives, archives that are part of a larger cultural organization or

university, and those primarily focused on preservation. The respondents were at various stages of their careers, ranging from newcomers to those with long tenures at their respective organizations to retired colleagues.

The analysis was conducted by the authors of this book under the guidance of Karen F. Gracy, Professor at the School of Information of Kent State University, whose "archival ethnography" approach formed the basis for our research methodology. Analysing qualitative data is a long and meticulous process of sifting through data and discussing the meaning of what is being said; a process of zooming in, zooming out, zooming in, and zooming out again. Since we conducted the research together, we had the advantage of being able to consult each other whenever we were uncertain about whether our reading of the data was accurate and could be interpreted in a similar way by the other person. The transcribed interviews contributed by working group members were coded and analysed by us, but in most cases, i.e., whenever possible, our coding and initial analysis was then checked by the same people who conducted the interviews. This does not mean that our research is bias-free, since we interpret the data based on our understanding and experience as film archivists. After an analysis of the data, using grounded theory methods to code and analyse the concepts that emerge from the data, we arrived at the conclusions presented in this publication. Despite the diversity of interviewees and organizations involved in the research, clearly discernible patterns applicable to different situations emerged from the data we collected.

The word "knowledge" is probably the most frequently used word in this book. But what do we mean by knowledge and how is it different from information? Knowledge is connected to people. While information can be considered explicit and it can be recorded in documents or information systems, knowledge is not necessarily articulated or made explicit in the form of documentation because it is associated with a person. The primary challenge is the transfer of tacit forms of knowledge: experience-based personal knowledge that may have become second nature to an individual to such an extent that its value is not recognized. The concept of tacit or implicit knowledge is one of the central concepts that we will return to time and again in this book. This type of knowledge cannot really be taught in archival programmes, nor can it be comprehensively expressed in institutional databases or collection policies. The challenge of passing on these forms of knowledge is amplified by factors such as organizational change,

the transition from analogue to digital media and technology, a changing work culture in the audiovisual archival field, and sharing cultures.

In carrying out this research project, we initiated and spread a discussion about the importance of knowledge sharing, beginning with our own institutions and the affiliated archival organizations. In observing how the topic of knowledge sharing has been discussed in our field in general over the past few years, we were pleased to see an evolving discussion reflected in notable initiatives. Among these were the panel on knowledge transmission and preservation organized by the Association of European Cinematheques in 2022 and the panel put together by FIAF and L'Immagine Ritrovata in 2023 during the Il Cinema Ritrovato film festival. We would also like to mention knowledge preservation initiatives such as that of the Association of Moving Image Archivists, which took the form of a workshop series and interview project entitled *Capturing Changing Technologies in Oral Interviews.*[2]

About this road map

Initially, our goal was to create a kind of "cookbook" outlining different methods of knowledge transfer that could be applied in different situations. However, our research evolved into something different and, instead of a set of how-to instructions, we created a road map to encourage readers to think about their own knowledge sharing situations and design their own "recipes." This shift in approach is due to one of the key findings of our research, which is that the possibilities for knowledge sharing depend on the unique aspects of each situation and the people involved. The same method applied in two different situations may have the same goal – knowledge sharing – but the steps needed to get there may be completely different, making it impossible to propose step-by-step methods that could be applied in any kind of audiovisual archive.

This book can be used as a source of general information about knowledge sharing in audiovisual archives. As such, it can be read as a summary of the theoretical concepts that emerged from the research we conducted. Because our aim is to provide general insights – presenting the patterns we found in the data – but also to provide nuances and variations, we have

→ **2** In 2022, AMIA organized workshops on the topic of using oral histories as a tool for capturing changing technologies in the field of audiovisual technology and preservation. The result of these workshops was a series of oral history interviews with technicians, archivists, and media creators, which can be accessed through the website of AMIA. During the Il Cinema Ritrovato film festival in 2022, the ACE organized a workshop on the 28th of June that was dedicated to the preservation of knowledge in the field of audiovisual preservation. During the 2023 edition of the same festival, FIAF, CNC, and L'Immagine Ritrovata organized two panels on the topic of transmission of knowledge in relation to the technology that is needed for film preservation, discussing questions such as collaboration with the industry when it comes to preserving and retaining knowledge about technology.

included many quotations from the interviews. All quotations have been anonymized, translated into English, and slightly adjusted for reasons of intelligibility without altering the meaning.

The book can also be used as a road map or guide that invites reflection on current knowledge sharing practices while helping the reader find their own ways to improve them. **Knowledge sharing is an integral part of audiovisual heritage preservation and should be explicitly included in the mission of institutions and organizations responsible for preserving audiovisual collections. Knowledge sharing should be part of all preservation activities, included in every job description, and an integral part of a professional attitude.** We hope to contribute to this goal with our book, which aims to encourage audiovisual archivists to think more deeply and critically about knowledge sharing. The exercises included in this road map are designed with this goal in mind, helping readers identify their knowledge and the challenges they face as well as assisting them in discovering potential solutions/methods that they may not have been aware of.

This road map is organized into four chapters. The first chapter, "Eight Insights into Knowledge Sharing in Audiovisual Archives," presents the key ideas about knowledge sharing identified by the conducted research and serves as the foundation for the next steps on this journey. The following three chapters represent three entry points from which to approach knowledge sharing. "Point of Departure I: Areas of Knowledge" discusses knowledge sharing processes from the perspective of four areas of knowledge. "Point of Departure II: Scenarios" deals with four scenarios that require special attention when it comes to knowledge sharing. The exercises presented in these two chapters are related to the research findings and can be done individually or (preferably) in a group setting together with other colleagues. The final chapter, "Point of Departure III: Methods," proposes and summarizes some of the methods described and suggested by the people we interviewed for this research.

"Skill and knowledge sharing is something unique we need to consider – especially with regards to the kind of work we do. As much as we preserve heritage, we need to channel the preservation practice to the knowledge and skills that are needed to manage this heritage."

Eight Insights into
→ **Knowledge Sharing in Audiovisual Archives**

Before you embark on a journey to explore the state of knowledge sharing in your organization, we want to share the key findings that emerged from our research on this topic in audiovisual archives. Throughout the book, we will be coming back to these points, elaborating on them and providing examples. These are the things to keep in mind as you begin to evaluate and improve your knowledge sharing practices.

→ 1

Audiovisual archivists hold tacit knowledge that is difficult to recognize, articulate, and share.

"I used to reach out to this person who worked at the archive for about 40 years and ask him things like, 'Sir, I'm thinking about this topic, can you think of certain titles, and just give me an idea of how this might pan out to the audiences.' And, off the top of his head, this person would then give me a list of titles, and not only the titles, but the content of the films, the condition of the films, because he had 40 years of experience in film inspection."

→ 3 In his essay "The Logic of Tacit Interference," Michael Polanyi argues that there is no strict distinction between explicit and tacit knowledge, because explicit knowledge also "must rely on being tacitly understood and applied. Hence all knowledge is either tacit or rooted in tacit knowledge. A wholly explicit knowledge is unthinkable" (144).

Much of the knowledge that audiovisual archivists possess is tacit knowledge, a concept elaborated by Michael Polanyi, starting from the idea that "we can know more than we can tell" (Polanyi 4). Tacit knowledge can be described as implicit knowledge embedded in personal experience. Tacit forms of knowledge can be found in all areas of knowledge used in audiovisual preservation. The term can be applied to the knowledge and skills needed for handling tools and equipment, but also to collection knowledge, knowledge about preservation projects, the organization of the archive and its history, work processes, and awareness of the knowledge held by colleagues. Some knowledge that is based on tacit experience can be made explicit and articulated in documents and databases. However, other aspects of it might prove difficult to share and remain unrecognized or overlooked, both by the individuals who possess it and their colleagues.[3] Therefore, special attention needs to be devoted to finding appropriate methods for identifying, sharing, and preserving this knowledge in order to prevent losing it.

→ 2

Documentation and people are sources of knowledge that complement each other.

"I actually did it for myself, I tried to write down everything I do, how I do it, what departments I'm connected with, what I outsource, etc., and it's extremely difficult. It works, but if someone would see just that without me there to clarify, it wouldn't mean much to them. I was not able to note down many things because they are too qualitative or they are soft skills. The factual things were easy to write down, but many things were just impossible. In order to share knowledge, you also need to find a good way of sharing it, and documenting it only in written form is a very limited way of expressing yourself."

Collection-related knowledge is preserved in both tangible and intangible forms. It is stored as information in tangible resources such as reports, publications, and databases, but it is also found in an intangible form, "stored away" in the people who work with collections. Documentation can serve as a permanent record whose purpose is to ensure that information is preserved over time. In contrast, people are living repositories of knowledge. Neither documentation nor people alone are sufficient to preserve and transfer knowledge. Though separate, these categories are not independent of each other, but engaged in constant interaction, complementing each other. People are often needed to make the documentation understandable and fill in the gaps. For example, the factual information about collection acquisitions may be recorded in a registration system, but the context and details of the same acquisition will be remembered only by those colleagues who were present at the time. The preservation and transfer of knowledge about audiovisual collections therefore depends on the interaction of tangible and intangible sources, explicit and tacit knowledge, and a combination of documentation and verbal exchange of information among colleagues.

→ 3

No archive is an island: knowledge is within and outside the organization.

"One of the films that I carried with me throughout my career was 'Inuit Scenes at Avvajja, Igloolik.' It became a flagship film for many reasons. Igloolik is a small village situated in the Foxe Basin, in Nunavut, Canada. This ten-minute home movie, to me, just kept growing and growing in terms of, you know, what can it tell us? What can we learn from it? And it was basically brought to my attention that the archaeologist who shot the footage in 1937 had never seen his own film. Wishing to find this footage to reconnect with his old friends, he and his friend searched in our database and located it using the key word Igloolik. We quickly provided them with a DVD copy and the archaeologist was able to annotate a lot of information such as his friends' names, their spelling, and some geographical features, before he passed away. In 2009, I screened the same film to mark the 10th anniversary of the territory of Nunavut. The response from the audience was just great. People were so appreciative, and they were able to fill in the blanks. By chance, a reunion of sorts took place during the Q&A. The daughter of the 'star' of the film, a 9-year-old boy, saw her dad on film for the first time."

Collection-related knowledge, as well as technical expertise, does not only rest with the audiovisual archivists working with the collections, but also with the people and communities whose heritage is represented in audiovisual collections, and with donors, collectors, film-makers, lab technicians, equipment suppliers, researchers, curators, and colleagues from other audiovisual archives. Their knowledge can enhance the understanding and preservation of the organization's own collections. This underscores the importance of thinking beyond the boundaries of an organization when it comes to knowledge sharing, which should also extend to and involve people outside the archive.

→ 4

Knowledge transfer is an ongoing process, but certain situations and types of knowledge require special attention and a dedicated sharing approach.

"There doesn't really seem to be a formal knowledge transfer process in place. When someone is retiring, or leaving the institution for another reason, this responsibility seems to fall mainly to the person leaving and the person replacing them, or the remaining colleagues, who try and answer the questions: What knowledge do I need to leave behind? What needs to be passed on? What are they going to need? And then those who are staying or replacing: What do I need to ask for? What can I gain from this person before they leave? So, that's a bit of a problem because it sometimes results in not necessarily all of the knowledge being transferred."

Audiovisual archivists are often naturally sharing knowledge through collaborative projects and informal communication without necessarily making a conscious effort to do so. Some types and areas of knowledge are effectively shared through these natural interactions without requiring additional time, effort, or resources needed for times specifically assigned to this process or formal methods of sharing. For example, when colleagues work together in the same room, they can share knowledge informally rather than relying on formal meetings. However, there is an inherent risk in relying entirely on natural or spontaneous knowledge sharing because certain situations and scenarios, as well as certain types of knowledge, need a deliberate and structured approach to knowledge sharing in order to prevent knowledge loss.

→ 5

The character of knowledge determines the appropriate sharing methods.

"People have the tendency to ask you informal questions such as, in my case, 'Tell me quickly, how do you make interviews?' And I think to myself: 'I can't give you my expertise in five minutes or an email.' The other week, a colleague sent me an email saying, 'Just give me quick instructions via email how to do oral history,' and I was petrified because if people approach it this way, then it's not oral history anymore. So, it also depends on how people approach what you do and whether they see it as a specific kind of knowledge."

Audiovisual archivists have a wealth of knowledge about the collections they work with. Their knowledge includes an understanding of what has been where since when and why, what it is made of, and how it was made. This knowledge is complex and unique to each collection. It is acquired through years of experience and combines historical, organizational, and technical information with material and equipment handling skills. All these different types of knowledge require different types of sharing: a different time frame, method of transfer (verbal/written), dedicated time or natural sharing.

→ 6

A sharing attitude is a precondition for knowledge sharing, but methods still need to be tailored to the people involved.

"It really depends on the character of the person. Some people really like to collaborate because they are open to that, they're comfortable with it. With some people, it's very problematic because they keep to themselves more and they like to work on their own. And I think that's very often the case in an institution like an archive or a library, where people are used to working by themselves. So, it really depends."

Knowledge sharing depends on the people involved, their attitudes, and on how they interact with each other. One of the key aspects of knowledge sharing among audiovisual archivists is the willingness and motivation of individuals to learn and share. Some people are naturally inclined to share their knowledge and some people show a clear willingness to learn, while others may be less motivated. Much depends on the interaction and relationships between colleagues. In addition, each audiovisual archivist has their own preferred style and methods of learning and sharing knowledge, and not all methods work for everyone. Some colleagues are more comfortable with verbal communication, sharing through collaboration, and asking questions, while others prefer sharing through writing. The same goes for learning: some colleagues are more comfortable with learning by doing, while others absorb knowledge better through reading. Individual learning and sharing preferences, as well as personal attitudes, always need to be taken into account when determining the most appropriate knowledge sharing methods.

→ **7**

Management awareness and support are essential.

"I wrote a report about the need to share knowledge and sent it to the management because people, our peers, started to leave and I felt that we were losing their knowledge."

Much of the knowledge sharing among colleagues relies on the initiative of individual team members. But sharing knowledge takes time, effort, and resources, and should not be left to individuals alone, but integrated into the priorities of the organization. The management has an important role and a responsibility to encourage knowledge sharing. This includes creating opportunities for knowledge sharing that allow the use of methods suited to the type of knowledge, the situation, and the people involved. The management is responsible for allocating time and resources for knowledge sharing, as well as motivating colleagues to learn and expand their knowledge. It needs to provide opportunities for individual colleagues to share their knowledge, welcome new ideas and suggestions to improve existing practices, and foster a collaborative environment and a sharing culture within the team. Without management support, knowledge sharing is a fragile process hinging on individual initiative.

→ **8**

We need to accept that some knowledge will be lost.

"We can't take an entire generation's memories and digitally download them into another generation."

Inevitably, not all knowledge can be preserved and shared. It may be possible to articulate some of the knowledge gained from experience, but it is not possible to transfer the experience itself to another person: something is always lost. This becomes most obvious when it comes to technical knowledge and skills – as some techniques and technical practices become obsolete, the knowledge associated with that technology, gained through experience, will slowly disappear because it cannot be fully transmitted. This fact of life, or fact of archival life, is analogous to the fact that not every single audiovisual production in the world will be preserved. It is vital to be fully aware of this when making the effort to preserve and save the knowledge that will be necessary to carry out our future preservation activities.

Point of Departure I
→ Areas of Knowledge

Audiovisual archivists possess a complex body of knowledge related to the organization they work in and the collections they work with. This body of knowledge includes historical, organizational, and technical knowledge and skills, as well as knowledge about the content of collections. Although these different types of knowledge and skills overlap and are interrelated, we grouped them into four main areas for the purpose of starting a more focused discussion on knowledge sharing:

1. **Organizational knowledge**: knowledge about the practices, processes, methods, and standards, usually specific to an organization.
2. **Knowledge about preservation activities**: knowledge related to projects or events that can be considered preservation activities, such as collection acquisitions, restorations, preservations, digitization projects, and curated programmes.
3. **Collection knowledge**: knowledge about the content of collections.
4. **Technical knowledge and skills**: knowledge of the techniques and material aspects of objects with which audiovisual archivists work, as well as skills in handling materials and working with technical equipment and tools to perform preservation activities.

The following four sections discuss knowledge sharing in relation to these four areas. Each section summarizes the **main findings** from the qualitative research study and weaves in **exercises** for the reader. These exercises can be used as a starting point for discussion and reflection and are designed to improve and develop knowledge sharing practices.

The exercises within each section are divided into the following steps:

STEP 1: Identify knowledge at risk – The exercise begins with reflection on the area of knowledge in question in relation to the reader's organization

and experience. It is meant to define a specific category of this knowledge area that is regarded as being at risk, for which improved methods of sharing need to be found.

STEP 2: Define the risks – Once at-risk knowledge has been identified, the next step is to define what these risks are in the scenario where this knowledge is not recognized or shared and is consequently lost.

STEP 3: Think of improvements – This step is meant to stimulate readers to come up with concrete improvements in the process of sharing knowledge that is at risk.

STEP 4: Analyse – After setting a knowledge-sharing goal, the next steps are meant to encourage and improve the reader's understanding of how this knowledge applies within their organization.

STEP 5: Map challenges – This step is here to help identify and map the challenges of sharing this knowledge. It will set a path that will help the reader understand which aspects of knowledge sharing need to be improved.

STEP 6: Plan action – The final step is to create an action plan, which should be as specific as possible.

For ideas on how to share a particular type of knowledge, refer to the **list of suggestions** after the final step of the exercise. For a more in-depth look at these methods, have a look at the last chapter, "Point of Departure III: Methods." Each section ends with a **sample exercise**, which is meant to serve as a reference or inspiration for carrying out these steps.

Before you start an exercise:

→ Choose the area of knowledge you want to focus on.
→ Decide if you want to conduct the exercise individually or with a small group of colleagues.
→ Reserve at least two to three hours to carry out the exercise.
→ Organize several large sheets of paper and pencils to write down and map the steps.

→ Try to focus your exercises on one category pertaining to a single area of knowledge at a time to obtain a result that is as concrete as possible. If you want to work on another category of the same area of knowledge, repeat the exercise, focusing on each category separately.

When you are done with your exercise:

→ After finishing an exercise, set a date for a follow-up meeting where you will discuss the progress you have made in applying the steps you defined.
→ Think about what you want to end up with. This may include a written document that summarizes the knowledge at risk, the risks of not sharing, the challenges encountered in sharing this knowledge, as well as a proposal for solutions and methods that can help improve knowledge sharing. This paper can then be presented to your management, funding body, or whomever else you need to convince of the importance of knowledge sharing methods.

How to Share: Organizational Knowledge

Organizational knowledge can be defined as knowledge specific to an organization. It includes what is done within the organization and for what purpose, how work is organized, and who is responsible for what. It encompasses knowledge about policies, procedures, operations, workflows, job and departmental responsibilities, and administration. Organizational knowledge can be expressed through strategies, collection policies, standards, job descriptions, step-by-step instructions, manuals, and health and safety instructions. Organizational knowledge also includes knowledge about how things were organized in the past, as well as a knowledge of team dynamics and an awareness of the expertise of the individual members of the organization. While knowledge about preservation activities is always related to a specific project or event, organizational knowledge is about how things are done in general. Organizational knowledge also includes instructions on how to carry out certain procedures, which means it overlaps with technical knowledge and skills when it comes to technical procedures necessary for preserving audiovisual materials.

STEP 1: Identify knowledge at risk

When you think about the concept of organizational knowledge at its broadest, what kind of knowledge comes to mind first as being at risk of not being shared (enough)?

→   To help with this exercise, organizational knowledge has been divided into several categories. Select those that you believe should be developed or better shared within your organization:

☐   Mission and vision of the organization, organizational goals and strategy
☐   Collection policy
☐   Procedures and standards (e.g., accessioning material, contacting donors, loaning archival materials, cataloguing digital objects)
☐   Understanding of the activities and responsibilities of the different departments
☐   Knowledge about which colleagues have which responsibilities
☐   Understanding of one's own tasks and responsibilities
☐   Who to turn to with questions that require expertise
☐   How to operate equipment (e.g., scanner, media player, viewing table, washing machine, printer)
☐   Who to contact in case of . . . (e.g., equipment stops working, internet is down, emergency situation)
☐   Other:

→   Discuss your answers with each other.
→   Choose one category to focus on in the next steps of this exercise.

Findings from research: Why is it necessary to share organizational knowledge?

To better navigate work and the workplace: Especially when you first begin working somewhere, learning how work is organized is the first step in navigating a job, tasks, job responsibilities, and in communicating and collaborating with co-workers. If organizational knowledge is not communicated and shared, it may be left up to individual initiative to figure these things out.

"I had to work it all out for myself: how the organization works, what different areas of responsibility there are here, what people's official tasks are, so to speak, what their real task is, what their conflicts are, where their alliances lie, where factions are formed . . . I had to find all that out first."

To create a sense of shared understanding and common purpose: Shared knowledge of how work is organized, to what end (goals, mission, vision of the organization), what one's role within the organization is, what colleagues in other parts of the organization do, and what standards everyone is using aligns work practices and contributes to a common understanding of how an organization works. Getting and giving insight into each other's work creates understanding and gives a sense of the bigger picture.

"Processes are known by other members of the team because we really understand each other and we understand the job description. Without one another, we cannot achieve our common goal."

To start sharing knowledge: Organizational knowledge includes an understanding of colleagues' responsibilities and work dynamics. Organizational knowledge is thus the first step in sharing knowledge among colleagues because it provides insight into who knows what and how to approach colleagues with what kinds of questions.

"Clearer roles and responsibilities would be helpful in many cases because you wouldn't get confused over who was supposed to be doing what or where the knowledge source should be."

To be ready to take over: In the specific case where someone is absent and someone else needs to take over the work, the knowledge of the specific workflows and processes they are working with needs to be shared with others so that they can more easily pick up the tasks of their colleagues.

To improve workflows: Standards, workflows, and processes change over time. They are developed around new activities and improved and adapted with practice and experience. To improve and change existing processes, you need to know and share how things are organized now.

"It would be great to have a loan form with parameters clarifying a few things, such as whether the cinema is a FIAF member, the condition of the film, and whether we have rights or whatnot. This form could be used

consistently when loaning films, and we could share it internally with an aim to improve it. We could optimize it or dismiss certain things or just say, 'It's great, it's perfect.' And those who come after us, new people who begin to work at the [name of institution], we could hand it to them and say, 'Look at this, does it make sense to you?' And they could dismiss it or make it better or improve it or not."

To communicate externally: How and why things are done needs to be communicated externally in different ways, e.g., to the users of the archive, to funding bodies to advocate and account for funding, or to collaborating partners when working together on a project and when it is necessary to align practice and methodology.

Step 2: Define the risks

→ Now that you have read about the reasons for sharing organizational knowledge, which of these apply to your category of knowledge?

→ What are the consequences and risks if this knowledge is not shared?

Step 3: Think of improvements

→ Now that you have defined the importance of sharing this knowledge and described the risks of not sharing it, what would you like to improve?

Findings from research: **Where can organizational knowledge be found?**

Because organizational knowledge is directly applied and used, it is **held by the people who use it on a daily basis. Organizational knowledge is also often formulated and made explicit in documents such as policies, manuals, and standards.**

Depending on use and experience, people might have different levels of organizational knowledge. Someone who has been in an organization for a long time is likely to know more than someone who just started working there because it takes time to get to know the processes, colleagues, connections, and so on. There are also marked differences in the level and depth of organizational knowledge. For example, one can have an understanding or an insight into what the work of a colleague in another department entails, yet not have the in-depth knowledge and experience necessary to actually be able to perform their tasks. This is the difference between "knowing how to" and "knowing of": different levels of depth of organizational knowledge that both have their uses.

Some departments are skilled in and used to documenting and sharing organizational knowledge. For example, in technical departments, the practice of documentation is often well developed.

"The best documented departments are the technical ones, which are used to it, because documentation is always necessary in software, and especially when you work with open source, which we like to do and so on. Maybe it's more natural for a technical workflow to be documented. And for a decision-making workflow or so."

Or in cataloguing, where documentation is at the forefront as the main task.

"Areas like cataloguing have got a much more formal sort of documented method of sharing information. And yeah, that's predictable because they are always so much more organized altogether."

Having processes documented is beneficial for newcomers.

"For [cataloguers], what they are really good at is collating all of the standards, providing all of the process workflow outlines for how their work needs to be carried out. That's one of the areas where, when new folk arrive, they have the benefit of a lot of documentation that they can apply and get quality-checked by their peers, so their work is better than it would be if they had to learn from scratch."

STEP 4: Analyse

→ How is this knowledge shared presently? Is it shared verbally, through documentation, a combination of both, or in other ways?
→ When (i.e., in what kind of situation) is this knowledge shared?
→ Who does this knowledge need to be shared with?
→ Not everyone needs to have the same level of knowledge. Define what level of knowledge is required (ranging from general understanding to in-depth knowledge)?

STEP 5: Map challenges

→ The following paragraphs describe the most common challenges encountered in sharing organizational knowledge. Do you recognize any that apply to your category of knowledge?
→ Can you think of any other challenges?

Findings from research:
What are the challenges to sharing organizational knowledge?

It is difficult to share and communicate knowledge about individualized systems.

Work processes and standards can be very specific to the way an individual works and can be difficult for others to understand. Particularly work processes, which are often developed through experience and shaped by the individual employing them. These are consequently based on what seems most logical and effective to that person. For example, in one institution, the loan process and the decision on each individual request is not based on a written policy, but on the experience of responding to requests in the past. This practice has been carried out by a single person, without any systematized standards or criteria that can be easily shared with others. Another example is that of an institution that did not record the location of films in the vaults in any database. As a result, in order to retrieve films, they were completely reliant on the memory of those few

colleagues who had been working there for years and had developed their own organization and structure of the vaults, making it difficult for other colleagues to locate films.

"Her system was great as long as she was alone. For two people, it was complicated, for three, it was very complicated, for ten, it was enormously complicated."

Certain systems may seem logical to those who work with them, but can be difficult to understand, explain, and share with others. Maintaining particular ways of working, and even demonstrating a reluctance to document them, may be a result of not knowing how to document work processes. There might be no apparent systematic logic to them, or the person in question may not know how to describe them.

"Maybe I'm so immersed in the process of doing the actual work that I no longer have the ability to see it with fresh eyes, or see what it should look like so that it's understandable to people like newcomers, or people who are just not used to the kind of technical vocabulary that I am using."

When organizational knowledge is perceived as common knowledge, it is typically not documented.

Organizational knowledge that is used on a daily basis comes naturally to the people who use it and may therefore be perceived as common knowledge. If it is considered to be common knowledge, there may be no need for explanation or documentation. For example, if people are solely responsible for the task of scanning films, there is no immediate need to explain or document the process. Organizational knowledge can also be perceived as shared knowledge within an entire team. Especially in smaller teams, where it is easier to gain insight into each other's workflows and responsibilities, there may be less need for dedicated sharing time.

"I remember it so fondly, the days when the archive was a much smaller place, because being involved in everything, that's one of the best ways to learn across the board."

In cases where organizational knowledge is neither verbally shared nor

documented, this can become a problem as soon as something about the situation changes. For example, when an organization grows and people have less opportunities to gain insight into each other's work, or when people who are sole holders of valuable tacit knowledge suddenly leave.

"A lot of the other things we lost were the procedures, workflows for doing specific things. Because certain people had done these things for so long and had been solely responsible for them."

If common knowledge is not documented, it can be lost. For example, one interviewee mentioned the loss of knowledge about the acquisition process that came about because the acquisition came to a complete stop due to lack of funding. The need to share or document workflows sometimes arises only after such a change has occurred. Another colleague mentioned that it was only after they left – when their former colleagues came back to them with questions – that they realized they should have documented their workflows in detail before their departure.

Existing documentation might not be accessible or used.

Even if policies, standards, and procedures are systematized, written down, and theoretically available to colleagues, this does not mean that they are actually used, consulted, and updated. There are several reasons why this information might not be used. For example, people may not be aware of its existence and may not know to ask for it. It is also possible that there is no designated location where this kind of document is normally stored. Furthermore, the available documentation may not be up to date, and manuals may be too large and difficult to navigate.

"Those manuals are from a time when these systems were introduced here and they were new. And back then I think they were used extensively – they were quite complex. There are huge metadata systems, or systems that contain everything we have and I only use a very little fraction of that. To go into the manuals and find exactly the right thing that you need to know to do a specific thing is very time-consuming."

Another reason documentation is not used is that some people rely on verbal explanations rather than written documentation. For example,

some people find it difficult to read step-by-step manuals. Other people might not have yet found an approach to documentation that could be useful for their work.

"I wrote a manual for the loans and requests department here, a manual on what to look for in digitization when doing a telecine from film. With illustrations and everything. I did that back then, I'm sure it's still around somewhere. It always gets forgotten; I know that already. Because when I came back, I asked a colleague about it and he said: 'I don't know what that is.'"

Documenting organizational knowledge takes time and effort.

Writing down organizational knowledge such as workflows and processes compels you to pause your work and reflect. The same is true for writing policies and standards. For example, formulating a collection policy requires dedicated effort, as well as time to reflect, formulate, discuss, and refine. Many respondents cited lack of time as one of the biggest challenges in creating documentation.

"I didn't have time then and I still don't really have that much time now. Time to write down or formalize, I mean. Obviously, it would be great if we could sort of pause or stop everything in order to get some time for documentation of all the various processes we have happening. But that's actually not the case."

Spending time on documentation is not always seen as a priority, and the daily work that needs to be done often wins out.

"You have to really find time for [internal documentation]. And you feel like you're not actually doing the work that you have to be doing because you have emails and things still coming in. And instead, you work on that."

Some colleagues suggested that documentation should be integrated into their daily activities in order to change the perception of documentation as a low-priority task, making it part of everyone's job.

"This is how we run the organization at any level, whether it's somebody updating the handbook regularly, or whether it's at a policy level, developing

new policies or going through new collection selection processes, it becomes something that everyone . . . it is part of their workflow, it is not perceived as something extra, on top, it's sort of embedded into day-to-day activities, and it's not like: 'I don't have time for that.' No, this is also your job."

Efforts to share organizational knowledge are often made at the last moment, when a sense of urgency arises.

People often become aware of the importance of documenting organizational knowledge only in situations where there is a concrete case and need for documentation so that knowledge is not lost. For example, in one archive, processes and workflows were carefully documented because of an upcoming personnel reduction and uncertain future for the organization. Another example shows that a rapid turnover of personnel makes it necessary to document workflows so that the new personnel can step in easily. Yet another example demonstrates how organizational knowledge was documented for the purpose of a possible new employee to secure the knowledge of a retired colleague.

"The big project we did was to put together a kind of guide, something you might hand a new hire, showing how to process things here. You know, these are our steps. Here's our label software, here are some examples of how the labels work. We had our fourth co-worker retire, and we were thinking, well, maybe she's not going to be replaced because of the financial issues right now, but there was a time where we thought we were going to have a new fourth person, and we thought we should have all this stuff."

In another example, a colleague became aware of the necessity of documenting their work processes in case of their own sudden absence.

"I figured that I should try to write it down, to really describe the process. So that if there's an intern or another colleague or a new colleague, if I'm ever to leave or if the car hits me tomorrow, someone can take over. So, I think that's the best way, to write things down."

A timely realization of the irreplaceable nature of this knowledge can become a reason to start documenting work processes.

"We found out over time that the know-how of professional processes is basically most often stored in the heads of colleagues who carry them out. And that's why we started codifying some work processes. So this is the reason we have codified processes that show how collections are processed and describe what the significance of the index cards is and what the information means."

In another example, a colleague explained that they had to figure everything out for themselves when they first started work, and this experience motivated them to create a policy.

"When I came [to the organization], there was no documented information about the value of that archive. You had to understand the importance of individual films, but the value of the archive itself was not clear. So now I'm trying to leave as many traces as possible about the archive – what it looks like, especially what its value is, because that was the biggest problem. It already happened that the archive had to literally be closed down because it was not seen for what it is: a place of great value. Now I am trying to create documentation about the value of the collection and to document how things are done. To create a policy, to force the administration to accept the collection policy, where everything would be described – what is stored there, how it is stored."

Waiting to create documentation or share organizational knowledge until there is an immediate need and sense of urgency may create the awareness necessary to set the process of sharing organizational knowledge in motion. While this may serve as a great incentive, in this scenario, there is a significant risk of being too late and losing knowledge.

STEP 6: Plan action

→ Based on the challenges you defined in the previous step, what does your team, department, or organization need to do to improve current knowledge sharing practices?
→ Create an action plan that defines the actual steps needed to make improvements.

Suggested Methods

→ Planning an induction process —— *pages 138–141*
→ Creating collective documentation —— *pages 150–152*

Sample exercise

STEP 1: Identify knowledge at risk

Defined procedures and standards for the proper use and maintenance of the winding benches and tools needed for film inspection. These should include "table manners" for film inspection tables and viewing benches, i.e., knowing how to clean the tables or benches after using them, putting tools in order so that other colleagues can find them, and handling the tools needed for film inspection in the appropriate way.

STEP 2: Define the risks

REASON FOR SHARING: Knowledge about the proper use and maintenance of the winding benches and tools needs to be shared in order to ensure the careful handling of film material as well as the longevity of tools and benches. It also contributes to making work easier.

RISKS WHEN NOT SHARING: People use the winding benches and tools as they learned elsewhere and interpret the "table manners" as they see fit. This might not always measure up to the standards the organization aspires to. It might cause damage to the materials, and machines and tools might wear down quicker when not used properly.

STEP 3: Think of improvements

Getting everyone on the same page concerning "table manners."

STEP 4: Analyse

HOW IS THIS KNOWLEDGE SHARED? This knowledge is usually shared verbally. Normally a more experienced colleague transmits it to the new colleague. "Table manners" are partly described in the documentation of workflows for film inspection. The knowledge is also partly shared through the documentation of workflows in collaborative wiki pages.

WHEN IS THIS KNOWLEDGE SHARED? Usually when someone is first getting started, at the beginning of employment. This type of knowledge is rarely shared at a later moment in time, since people are expected to possess it. It is only shared later on if, for example, someone has been "out of practice" for some time, or is using certain tools for the first time.

WHO DOES THIS KNOWLEDGE NEED TO BE SHARED WITH? Newcomers and everyone working with the tools and winding benches.

LEVEL OF KNOWLEDGE: The same for everyone working with these tools as it is the application of a standard. It is all about getting everyone on the same page and sharing the same understanding.

STEP 5: Map challenges

→ "Table manners" are considered common knowledge, and when one is used to a certain practice, it is difficult to reflect on it again and change one's ways. Some colleagues who have been working in the same organization for a long time get so used to their particular way of working that they might not be open to changing it. On top of that, they might not be comfortable with someone else, perhaps even someone who has not been working there as long, telling them what to do.

→ Depending on who is doing the explaining, these "table manners" are communicated and explained in different ways. When the information is passed on incorrectly or shared only partly, it is difficult to change it because people get used to doing things in a certain way.

→ There is no written standard to refer to specifically for "table manners," and we might not even all agree to the same standard of "table manners."

→ A document clearly describing the steps that should be taken in inspecting prints for the cinema is available. This document not only provides technical instructions, but also tries to convey the importance of care and respect for the materials used. It could probably be revised to include more points expounding on the correct use and maintenance of equipment. Not everyone may be aware of the existence of this document.

STEP 6: Plan action

→   Create collaborative documentation on how to use winding benches and other tools necessary for inspecting film. Take these steps:
1.   Define topics
2.   Gather a group of colleagues
3.   Assign each person a topic to cover in the already existing online collaborative wiki pages
4.   Set date to discuss and adjust the entries

→   Review existing documentation on film print inspection and try to include "table manners" or a reference to the newly created documentation.
→   Talk to colleagues about the existence and importance of the documentation related to "table manners."
→   Make sure to take time to properly introduce new employees to "table manners," drawing their attention to the newly created documentation, even if they came to the organization with a good deal of previous experience.

How to Share:
Knowledge about Preservation Activities

Knowledge about preservation activities includes the details, context, and background of archival processes such as collection acquisitions, curating programmes, access requests, digitization, conservation and restoration projects, and cataloguing. This knowledge includes what is being done or has been done during a preservation activity, as well as the how and why of it. It also encompasses knowledge about the criteria and decision-making processes that played a role in determining the outcome of an activity. While the organizational knowledge described in the previous section can be thought of as general knowledge about how things are organized and should be done, preservation knowledge is always specific to particular projects, events, and situations. These can include the details of the selection process for new collection acquisitions, the reasons behind certain restoration interventions, the relationship with donors, and the specific organizational and historical context of activities, such as the changing availability of financial resources at different points in time.

STEP 1: Identify knowledge at risk

→   When you think about the idea of knowledge about preservation activities at its broadest, what kind of knowledge comes to mind first as being at risk of not being shared (enough)?
→   To help with this exercise, knowledge about preservation activities has been divided into several categories. Select those that you believe should be developed or better shared within your organization:

☐   Details and context of past and/or present acquisitions
☐   Details and context of past and/or present restoration projects

❏ Details and context of past and/or present preservation projects
❏ Details and context of past and/or present digitization projects
❏ History and nature of relationships with donors and depositors
❏ The logic behind and the history of systems employed in the past
    (e.g., inventory, archiving, or documentation)
❏ General history of the collections and the organization, illustrating
    the contextual background of preservation activities
❏ Other:

→ Discuss your answers with each other.
→ Choose one category to focus on in the next steps of this exercise.

Findings from research:
Why is it necessary to share knowledge about preservation activities?

To understand the rationale behind projects: When carrying out preservation activities, sharing knowledge about the context and background of an activity creates an understanding of the rationale behind the procedures and the outcome of the activity. For example, someone working on digital remastering and restoration will find it useful to know the background, expectations, and funding situation of the project in order to understand what the project can entail and what approach to take. For a team, it is useful to understand the rationale for activities when preservation procedures and policies have changed or are changing, as in a shift from analogue to digital preservation. A shared understanding can allay potential concerns about changing procedures and help get everyone on the same page.

To make future generations understand past preservation activities: Knowledge about past preservation activities, the reasons behind them and the circumstances under which they were undertaken can prove useful at a later date to people who were not directly involved. This kind of information helps future generations of archivists understand what brought about the results of those activities. For example, knowing the circumstances of a past analogue duplication can help others understand its outcome.

"There were prints that were simply not optimally duplicated. Sometimes there were just contact prints of things where you'd ask yourself: 'Why is this so badly made?' Later we found out that there wasn't any more money or a chance to do things better. A large number of films that were already in bad shape had to be printed quickly, and that's how they got made."

To facilitate future preservation activities: Knowledge of past preservation activities can facilitate future preservation work. For example, in film restoration, the principle of reversibility is important. The ability to trace decisions and interventions can be facilitated by maintaining a transparency about how and why a restoration was performed. With the help of this information, a past activity can be reconstructed, which is necessary when it comes to continuing or redoing preservation or restoration work on the same title. The information contained in a restoration report can serve as a road map for future restorers.

STEP 2: Define the risks

→ Now that you have read about the reasons for sharing knowledge about preservation activities, which of these apply to your category of knowledge?
→ What are the consequences and risks if this knowledge is not shared?

STEP 3: Think of improvements

→ Now that you have defined the importance of sharing this knowledge and described the risks of not sharing it, what would you like to improve?

Findings from research:
Where can knowledge about preservation activities be found?

Knowledge about preservation activities resides with the **people directly involved in the activity**, such as a digitization or restoration project. Information about the context of a project, such as the motivation for undertaking the project, the hurdles encountered along the way, and the decisions made along the way can all be elements of shared knowledge among the people involved.

Knowledge about preservation activities may also be held by **colleagues not directly involved in the activity, but present during the time of the activity**. They may have gained knowledge as witnesses, bystanders, or informed and interested colleagues. One interviewee gave the example of turning to one colleague in particular with questions about the context of past acquisitions because that person had shared an office with the director for years and therefore ended up knowing a lot about the context of past decisions and the decision-making processes behind past activities.

"To describe what her knowledge contains is difficult because it really includes quite a lot. She knows a lot of things about a lot of different topics. And she knows those things because for many years she sat opposite the person who made all the decisions. She was in the same room with the person when all these decisions were made and when people argued. She's always been a very good and careful listener and, without knowing that, she understood or learned the pattern of this decision-making. So, if she thinks about it, she can figure out why a certain decision had been made."

Knowledge about preservation activities may be documented during or after those activities, for example in **databases, project reports, private documentation, and email conversations**. How things were done in the past and under what circumstances, the history of an institution and its collections, which provides the contextual background for preservation activities, can also be found in documentation and literature about an institution, such as an **institutional history**.[4]

→ **4** A number of histories of audiovisual archives have been published, either by the institutions themselves or through affiliated authors and publishers. Some examples include the history of the National Film and Sound Archive in Australia (Edmondson, *National Film and Sound Archive: the quest for identity*), an elaboration on the beginnings and the first decades of the Austrian Film Museum (Kondor, *Aufbrechen – Die Gründung des Österreichischen Filmmuseums*), the volume on the history of the British Film Institute (Nowell-Smith and Dupin, editors, *The British Film Institute, the Government and Film Culture, 1933–2000*) and the history of the National Film Archive in Prague (Trnka, *The Czech Film Archive 1943–1993: Institutional Development and Problems of Practice*).

STEP 4: Analyse

→ How is this knowledge shared presently? Is it shared verbally, through documentation, a combination of both, or in other ways?
→ When (i.e., in what kind of situation) is this knowledge shared?
→ Who does this knowledge need to be shared with?
→ Not everyone needs to have the same level of knowledge. Describe what level of knowledge is required (from general understanding to in-depth knowledge)?

STEP 5: Map challenges

→ The following paragraphs describe the most common challenges encountered in sharing knowledge about preservation activities. Do you recognize any that apply to your category of knowledge?
→ Can you think of any other challenges?

Findings from research:
What are the challenges to sharing knowledge about preservation activities?

Background and context are not always shared during the activity.

Knowledge about the context of preservation activities, such as the reasons why a particular title was selected for preservation, where the initiative for a digitization project came from, or why a particular technical approach was chosen, is not necessarily shared with all colleagues involved at the time of the activity. Reasons for not sharing this type of information may include a lack of sense of urgency for sharing at the time, combined with the idea that sharing contextual information may not be essential to getting the job done.

Knowledge about preservation activities is often not documented when it is perceived as common knowledge.

When knowledge is perceived as common and shared, there is no pressing need to share and document it. This is especially true for contextual and background information that may be considered too trivial to document at the time of the activity. However, if knowledge has not been documented during the project, once the preservation activity is completed, what was considered common knowledge at the time can quickly be lost. As a result, knowledge about preservation activities can easily disappear. At the same time, this is precisely the kind of information that can make past activities and decisions understandable to future archivists and ensure a better continuation of projects in the future. One colleague has expressed the hope for documentation of preservation projects to become part of the workflow.

"I hope to see the need for documentation become an inherent part of our professional ethics. And not only because of the unpleasant experience of not having any documentation from the past, but because it is seen as part of our responsibility and a way of ensuring that we are being transparent about our decisions, especially as a public institution."

Documenting preservation activities is time-consuming.

Extensive documentation of preservation activities is often perceived as time-consuming. The amount and extent of documentation are determined by the time available and depend on individual initiative. Documented information may be limited to what is absolutely necessary.

"A couple of notes saved in a file, an email, or a note in the database, little things. In general, I try to do it as much as possible. I have the feeling it's not enough, but it's really the most I can do. This is what we can afford to do, what I can afford to do with the time I have in this office, and we have to make do somehow."

Limited documentation possibilities can hinder the documentation of preservation activities.

Information about preservation activities may not be documented because of a lack of standards for documenting activities and/or a lack of a designated location where such documentation can be safely stored. For example, in a collection database, there may well be a location where it is possible to document when an item was created, by which film lab, and from which item. But there might be no such location where information about technical difficulties during the preservation process or the reasons why one item was chosen over another as a source for duplication can be documented. If there is nowhere to document this kind of information within existing structures such as a collection database, this may result in no documentation at all. Alternatively, it might lead to documentation kept in personal archives, either physical or electronic, which remain inaccessible to colleagues.

"Another issue is that it's one thing writing it down somewhere, but where does that document 'live?' Who knows it exists?"

Documentation may exist, but it is not created with the intention of being shared and therefore remains inaccessible.

Some documentation created in the course of preservation activities is not documented with future access in mind. For example, written correspondence, such as conversations with donors in the process of finalizing donation agreements, or communication with film labs about analogue preservation also contain information. Written communication in the form of letters and emails can be useful to consult at a later date to understand why certain things were done in certain ways and what led to certain decisions.

Documented knowledge created during the course of an activity may end up in personal folders. Without a structure, plan or consensus among team members about where to file this documentation in shared folders or systems, it remains personal, unorganized, scattered, and inaccessible to colleagues who do not know how to access this documentation.

"If the person is not there, then this whole room with all this paper loses its value. Because then you don't know what this is. And I think that's what we're dealing with, especially with these finding aids, with these shelves where the paper is. I think that's also the case in other archives. Only the people who have worked on it or who have been there for a long time know what this table means here, or what the accessions book means exactly."

Practices of documenting preservation activities change over time.

The practice of documenting preservation practices changes over time. For example, in one institution, there was no standard practice of registering incoming items in the early years of the archive's existence. This meant that the employees were wholly reliant on the knowledge of those colleagues who were there at the time of acquisition for information about early acquisitions. Another example illustrates the change in the practice of documenting preservation projects that took place together with the shift from analogue to digital preservation. In the analogue duplication process, details about the film elements to be processed by the lab were carefully documented in order to avoid making mistakes. This kind of precise documentation became less important with the advent of digital technology because of the changes in the process of quality control, and as it became easier to correct mistakes digitally than it was the case in analogue processes.

A change in documentation practice is sometimes the result of a change in the general approach to work practices. Some archivists may have learned by doing, through experience, and documentation may not have been part of that process, while other archivists who want to know about past practices may be more aware of the need for documentation.

The knowledge of those who have been around is not always identified and shared.

Particularly when it comes to knowledge held by people who have acquired knowledge about preservation activities by virtue of being there, as witnesses to an activity, there is usually no immediate reason to share or document this knowledge. Moreover, they and their colleagues may not

necessarily identify themselves as knowledgeable about preservation activities because they were not directly involved in them.

The context of preservation activities has a narrative quality.

Stories about preservation activities are often described as anecdotal, folksy, and subjective. These characteristics can make it difficult to document this knowledge in, for example, a collection database based on codified information. It is also a problem to document it when using fields with a controlled vocabulary focused on describing the technical properties and identifying the details of collection objects rather than the context, history, and background of the activities related to the collection object.

Q: "Once these restoration projects are done, or even during the restoration projects, do you document them? And do you keep any kind of record of what you've done – the work and the process?"

A: "No, I'm afraid not. It's verbal, and anecdotal. I'm not really an archivist. I'm a sound engineer with a second string to my bow as a video engineer. I mean, it's a very good point. And it has crossed my mind. I thought maybe I should write all this down. But, no, it's not something I've ever been required to do."

This is even more true for background information that indirectly tells something about preservation activities. This can include the economic and practical realities of the time, the capabilities and limitations of audiovisual media production, the technical methods available in a film laboratory, but also the archivists' personal experience of carrying out these activities. Stories about what went on behind the scenes of projects go beyond just talking about the details of an activity – they can provide valuable insight and understanding about the background and circumstances.

"There was some impetus to copy nitrate film onto acetate so they didn't have to store the nitrate. So, films would be sent one by one to the cheapest laboratory in [city name] to be copied onto 16 mm and for the nitrate to be destroyed. So many of our silent films survive only in that form. And it's horrible to think about. But those were the economic and practical realities of the time. And someone picking up a film, a new staff member, looking at

it in such a form today, would not understand that. Because they would not know the printing method, they would not know the circumstances. And so you need to explain that this is why it happened. And this is why it looks this way. Because the whole history of laboratory treatment and so on will simply be unknown to them. It hasn't really been documented."

Articulating and documenting this knowledge might be a possibility, but some narrative information might be better conveyed verbally because it can convey more than can be done in writing.

"[Talking about a lecture:] How the curation comes about, how decisions come about, the text didn't outline that. And that enthusiasm, also for the programme and for the films, it didn't convey that for me like hearing [colleague's name] speak did."

Sensitive information is difficult to document and pass on.

Related to the narrative nature of knowledge about preservation activities is the fact that some stories about preservation activities are not documented or are only shared orally because of their sensitive nature. For example, the details of certain acquisitions may have been withheld from documentation and not shared because they might not be entirely legal. Several interviewees described stories about film archives acquiring new film prints by striking new elements from borrowed prints overnight.

"This film inspector, he used to tell me hilarious stories about how films came into the archive. One day, I asked him why we have so many films from [name of region] that I really love? How come these films are in the archive? How was this achieved? And he just laughed and told me that whenever films used to come to the film festival, dupes were made overnight at the lab. This is not documented anywhere. And this is how it was done."

This type of knowledge is perhaps best passed on verbally, as here the issue of trust also comes into play. One example illustrates how gaining the trust of donors helps in the exchange of knowledge providing useful background information on collection materials.

"You had to get to know these people, who were originally very suspicious of talking to a government employee. You had to gain their confidence, and one of them had to introduce you to another. And you had to go and visit them, and even spend time with them. And then you saw the background behind their collection, or why they put it together the way they did. Why someone sometimes re-edited what they had, which is terrible, but they thought it was a good idea. So, you're left with the work they did. Sometimes they would edit two films together because it looked good to them. You had to go back and untangle the films, all of these things are collection background material, and it easily gets lost."

There are limits to how much can be conveyed through official institutional histories.

Knowledge of an institution's history can provide insight into the background of past preservation activities. For example, institutional histories can provide insight into how policies and approaches have developed and changed over time, how collections have evolved, and how the organization itself has changed. Particularly when institutions are large and have a long and complex history, a written history can provide valuable insight. However, institutional histories can be chock full of information and dry, and therefore may not appeal to everyone. They may also leave out the personal, or more subjective and perhaps sensitive stories concerning the people involved, focusing instead on more general information about an institution's history.

It is difficult to share and pass on connections and relationships.

Relationships with donors, film-makers, and technicians are an important link to the knowledge outside of an organization. While these are primarily professional in nature, there is something very personal about them – donors, film-makers and technicians tend to come back to those particular people on the team with whom they have already established a relationship. For example, when it comes to requests or offerings, donors contact the people they know in an archive because they trust them. When

those people are no longer part of an organization, and have not passed on their connections, these relationships might end up disturbed or lost. The departing colleague can help by making an effort to introduce the newcomers/other colleagues to the people outside the organization with whom they feel it is important to maintain a connection.

"We have issues with that, knowledge in someone's head about previous donations, about the time when they came in . . . They were involved in it and they know what all the problems were, but it all stayed in their head. And then down the line someone else in another team tries to establish contact with the donor and then it doesn't work out. But then the first person says something like: 'Oh yeah, well, this is a really sensitive relationship, but that was never documented.'"

Step 6: Plan action

→ Based on the challenges you defined in the previous step, what does your team, department, or organization need to do to improve current knowledge sharing practices?

→ Create an action plan that defines the actual steps needed to make improvements.

Suggested Methods

→ Creating collective documentation —— *pages 150–152*
→ Organizing collective screenings —— *pages 153–154*
→ Planning a period of overlap —— *pages 155–157*
→ Capturing knowledge through oral history —— *pages 158–162*
→ Involving honorary employees —— *pages 163–164*
→ Creating and using an alumni group —— *pages 165–166*

Sample exercise

Step 1: Identify knowledge at risk

Knowledge about past and current digitization projects, which provides details about the digitized elements. Digitization projects often include the creation of multiple elements and it is difficult to get the right information about which element should be used for what purpose from the database.

Step 2: Define the risks

Reason for sharing: Gain an overview of all the digital elements associated with a film title. Try to understand the relationships between these elements, and find out which digital file to use for what purpose, which of them is the latest colour-corrected version, etc.

Risks when not sharing: If this information is not documented and accessible, we run the risk of falsely interpreting and using digitized elements.

Step 3: Think of improvements

Create better practices for documenting digitization projects, which will specify the differences between the final outcomes of a digitization project.

Step 4: Analyse

How is this knowledge shared? Through verbal communication, through minimal information in the database, indirectly, through progress reports on digitization.

When is this knowledge shared? During projects, or when someone is retrieving the file and the person who was involved in the digitization can fill in the gaps and provide the details that are missing from the database.

Who does this knowledge need to be shared with? Everyone who uses these digital files. This information needs to be documented so that future archivists can interpret what was done in the past.

Level of knowledge: Enough information to make clear what the file is, whether it is a final version, a master or mezzanine file, etc.

Step 5: Map challenges

→ This knowledge might rest with the people who were involved in the project, but they might not remember it after some time has passed. Additionally, they may not be around any more at a certain point in time.

→ Documentation limitations are definitely an issue, since the database used for documenting digital collections does not allow us to link digital elements to mark how they relate to one another, and only allows us to specify very few details.

→ Information about the created digital elements might be kept in project documentation and email conversations, but the problem with this documentation is that one still has to deduce it to get at the information about a specific digital element. In addition, this documentation might not be accessible to all or it might even be private documentation.

→ Time is another issue – there might not be enough time to document the information about the deliverables after a project is completed, although this is essential for the future use and understanding of these elements.

Step 6: Plan action

1. Define what fields should be introduced to the database in order to specify the version of the digitized elements. These should make it possible for the person retrieving the files to see if the elements in question can be used for a screening or still need to be digitally mastered.
2. Create an internal vocabulary that will help describe different versions of digital elements.
3. Communicate the new documentation standard to colleagues and document it in workflow documentation.
4. Update this information whenever past digitization projects elicit questions that cannot be answered by information currently found in the database.

How to Share:
Collection Knowledge

Collection knowledge is knowledge about the content and background of collections. There are different levels of collection knowledge, ranging from knowledge about individual collection items to a broader understanding of the connections between individual items across collections and sub-collections. It can also include a more general overview of what is held in an archive. Collection knowledge also covers content-related knowledge such as the film history and media history background of collections, their production and reception history, intellectual property and copyright information, and an understanding of the collection focus of an archive.

STEP 1: Identify knowledge at risk

→ When you think about the concept of collection knowledge, what kind of knowledge comes to mind first as being at risk of not being shared (enough)?

→ To help with this exercise, collection knowledge has been divided into several categories. Select those that you believe should be developed or better shared within your organization:

☐ General understanding of what the collections hold
☐ Understanding of collection focus and collection strands
☐ Expertise on sub-collections
☐ Knowledge about film-related collections
☐ Intellectual property and copyright information
☐ Other:

→ Discuss your answers with each other.
→ Choose one category to focus on in the next steps of this exercise.

Findings from research:
Why is it necessary to share collection knowledge?

"People with that sort of knowledge are the powerhouse of every collection, collecting institution, or heritage institution."

To set acquisition priorities: Knowledge about what an archive holds and what is missing helps in making choices about new acquisitions. For example, when a 35 mm film print is offered for sale, it is necessary to know if this title is already available before deciding on acquiring it. Or when a collection is offered for donation, it is necessary to know if the collection relates to and complements existing collections and fits the collection focus. When acquiring new collections, their value and importance are determined partly on the basis of collection knowledge.

To set preservation priorities: Preservation priorities are made based on collection knowledge and an understanding of the value and importance of certain titles.

To catalogue collection objects: Identification and description of (the content of) collection objects done in the course of cataloguing generates knowledge of the collections in question and is facilitated by prior collection knowledge. Cataloguing often includes the documentation of information related to the audiovisual work itself, the content of this work, but also details on preservation activities (acquisition, restoration) and material characteristics. It depends on different areas of knowledge and skills and establishes connections between them.

To provide access to collections and answer requests competently: Having information about collections is a necessary first step in providing access to them. Without knowing what the collections consist of, it is impossible to find, share or present anything to the public. Along with information about individual objects in the collection, knowledge of how

these objects relate to one another is helpful in finding these objects in the collection. For example, if a curator or a researcher comes to an archivist with a thematic query, an extensive knowledge of the collections will help them provide an adequate answer. In addition, knowledge of the rights associated with audiovisual works is necessary in order to know how the works can and should be used.

To curate collections: Organizing screenings, exhibitions, and online archives using collection objects can only be done on the basis of knowledge about the content of collections.

To research collections and set research priorities: Being aware of and keeping informed about the extent and depth of collection knowledge in your team is necessary for setting priorities for new research, and thus the development of further collection knowledge.

To develop collection knowledge: For knowledge to be developed, it is necessary to have an idea about the existing and missing knowledge about collections. Communicating collection knowledge and sparking an interest for it in others can lead to new discoveries. For example, one interviewee, who was doing research on a particular musician, shared their interest and efforts with colleagues. This led to an awareness of his interests in others, who consequently kept an eye out for and reported any new information found on this person to him.

"My interest in that is communicable, I can convince you that you should go and read a book about [musician's name]. I mean, I am the only one who's ever written one so I'd be doing you a disservice. But doing that and making it a public thing, it became . . . not quite a running joke. But in a way, it became something that my staff would have a good relationship with me about, they'd pull my leg, you know, making some jokes about [musician's name], but they kept finding information. Somebody'd be reading a newspaper about something else from [year] and they'd come across [musician's name] and they'd copy it and bring it to me delightedly and say: 'Look at this, look at what I found.'"

STEP 2: Define the risks

→ Now that you have read about the reasons for sharing collection knowledge, which of these apply to your category of knowledge?
→ What are the consequences and risks if this knowledge is not shared?

STEP 3: Think of improvements

→ Now that you have defined the importance of sharing this knowledge and described the risks of not sharing it, what would you like to improve?

Findings from research: **Where can collection knowledge be found?**

While existing knowledge about collections is vast, the knowledge that can be developed about collections is potentially infinite. As audiovisual collections grow, new knowledge is constantly being developed. But the knowledge about already extant collections is also endless, as the research, re-evaluation, and re-contextualization of existing collections go to show, producing new knowledge at every turn. The vast scope of collection knowledge means that **collection knowledge does not usually reside with one person, but is distributed among different people working in different departments**. This may include archivists, technicians, and curators. **Collection knowledge also resides with people outside the archive**, the makers behind the audiovisual works in the collection and those who have worked with collections or with collection foci, such as scholars, journalists, curators, and film-makers.

"Film historians often know much more about the collection than the people who are working there right now. Or curators who have been getting information from time to time through inquiries over several decades. Naturally, they know more than the person who started working there two years ago."

Developing collection knowledge and making information about collections accessible is a central activity for audiovisual archives. Collection knowledge is developed intentionally through research and collection cataloguing, but also through archival activities such as acquisitions and responding to user requests. In-depth collection knowledge is developed through specific projects such as research projects, publication of online collections, DVD releases, curated cinema programmes and exhibitions, educational programmes, publication of filmographies, and publication of literature on other collection-related topics and themes.

Consciously developed collection knowledge is thus often associated with some form of documentation and sharing as part of its outcome. For example, the processing and cataloguing of collections results in database records that contain information about their contents. When it comes to special projects about collections that come to be realized through research or curated programmes, these sometimes include a clear goal of producing and sharing knowledge in the form of an article, conference paper, programme notes, exhibition catalog, or a DVD or Blu-ray booklet.

"I've always considered one of the best reasons for writing about a subject to be the fact that if you write about a subject, you have to read about it. You know, if you want to write about it and feel confident about what you're writing, you got it, it becomes kind of a compulsory learning process. So if you really want to learn about something, make yourself say something about it in writing."

STEP 4: Analyse

→ How is this knowledge shared presently? Is it shared verbally, through documentation, a combination of both, or in other ways?
→ When (i.e., in what kind of situation) is this knowledge shared?
→ Who does this knowledge need to be shared with?
→ Not everyone needs to have the same level of knowledge. Describe what level of knowledge is required (ranging from general understanding to in-depth knowledge)?

STEP 5: Map challenges

→ The following paragraphs describe the most common challenges encountered in sharing collection knowledge. Do you recognize any that apply to your category of knowledge?
→ Can you think of any other challenges?

Findings from research:
What are the challenges to sharing collection knowledge?

Systems for documenting collection knowledge change.

Every audiovisual archive has a system for documenting information about its collections, usually an electronic database. This may be one central database for all collections, or multiple databases for different collections. Over time, documentation and database systems change, and information about collections may have been stored differently in different databases. For example, at some point, an electronic database replaced the index card system. The information from the index cards was transferred to the electronic database but some information, such as handwritten notes revealing the authorship of the entries, does not fit neatly into a database field and was therefore not transferred.

When information is not migrated from one system to another, old documentation systems remain valuable for future reference. To use this information, you need to know where to find it and how to navigate the older documentation systems. Colleagues who have worked with previous databases or systems may be able to help you navigate this information.

Collection knowledge is tacit knowledge.

Collection knowledge gained through visual contact with collection items is particularly difficult to transfer. Knowledge about audiovisual collections is developed by seeing the works, being exposed to them. The first-hand experience of watching an audiovisual work generates a different

kind of knowledge than reading about the same work. Viewing collection objects is therefore still necessary and cannot be replaced by indirect forms of collection knowledge.

"It sticks in my mind. And I don't think anything can replace just looking at stuff. Now, of course, it's a time-based medium. And that takes a lot of time. So, it does unfortunately mean that it takes time to acquire that kind of knowledge."

Knowledge gained from watching audiovisual works can be retained in memory. To a certain extent, it may be possible to articulate and transmit the knowledge gained through this experience, but the entire experience itself cannot be transmitted and therefore remains tacit.

"That [knowledge about the collections] is so far away from what [former colleague's name], for example, knew. You can't compare it at all. And, of course, there's the question of how he can pass it on. He can't tell you about every film he's seen, so it's still a lot of work for you – no one can take that away from you."

Having an audiovisual memory of works is useful for a variety of things, for example, when it comes to answering specific questions. There is no way to answer such questions about the content of the material that does not include seeing the footage. One of the interviewees said that they rely on their memory even when the database is not working.

Collection knowledge evolves over time, making it a difficult thing to share over a short period of time.

Collection knowledge develops over time through working with the collections. This means that people who have worked with collections for a long time often become repositories of rich collection knowledge. Some long-time staff members have mentioned that they feel like they have "grown up" with the archives, having accumulated a great deal of knowledge about the collections over time.

Because knowledge about the collections builds and evolves with time, it can be difficult for newcomers to gain the same breadth and depth of

knowledge. In order for archivists to be able to develop collection knowledge, it needs to be possible for them to work with collections for an extended period of time. However, the issue of short-term employment and rapid turnover was a recurring theme throughout the interviews. This turnover problem is due both to a personal preference to stay with an organization for a limited period of time and to organizations that do not offer permanent contracts.

Knowledge developed about collections is not always shared with others.

Documentation generated by research and collection processing may remain unpublished and unshared. This can take the form of notes from a visiting researcher, personal notes from a colleague processing collections, or documentation gathered in preparation for a curated programme. These forms of documentation may not be shared for a variety of reasons. Perhaps it is because they are not yet structured in themselves, or due to the fact that there is no central shared folder for storing "unstructured" documentation. It may also be because there is no designated place for this kind of information in existing database fields (e.g., information about collections rather than individual collection objects, or oral history interviews with film-makers that do not fit into a film database).

Even when the collection knowledge resulted in a presentation or publication, it is not always shared with and known to all colleagues. Not sharing readily articulated or even published research is a missed opportunity for disseminating collection knowledge across the team.

In order to leverage collection knowledge, it must be recognized among colleagues.

It is important to have an idea of each other's expertise if we are to access and use people's tacit knowledge about collections. Sometimes knowledge about collections does not reside with the people you would expect to find it with. Tacit knowledge about collections can also develop as a result of regularly working with collections, for example, inspecting prints for cinema screenings, physically organizing collection items in the vaults,

digitizing large numbers of collection items, processing and registering new acquisitions, working as a cinema manager in a location where films from the collection are screened, or assisting archive users with viewing. The people who occupy these roles are not always recognized as valuable sources of collection knowledge because they do not work directly with collection content (as curators do), but indirectly. The example below describes a situation in which a curator approached a collections manager to learn about the contents of a collection. The collection manager, in turn, forwarded this request to an archivist in the department of film-related collections.

[Excerpt from an email conversation]

Once again a rather vague request. Requested is a Hans Moser film with potatoes.

Thanks!

[Request forwarded from collection manager to archivist working in the film-related collections department]

I have every reason to suspect you of possessing the greatest knowledge of domestic film heritage of us all. Can you use the scene description below to find out which Hans Moser film they could possibly be referring to?

[Reply from archivist to manager]

I'm not quite sure if this is a compliment, but will shamelessly take it as such. At the same time (pretending to multitask) I will go inside myself and see if I can find the potato scene there.

[Archivist's reply to request]

Thank you for your inquiry. Hans Moser's complete oeuvre is difficult to survey, but according to your information, a spontaneous assumption suggests itself to me.

The described scene was realized by Peter Alexander in one of his Hans Moser sketches. I assume it was in one of his shows (especially since it is

about "potato pancakes"). Whether such a scene actually occurs in a Moser film would have to be checked. I rather suspect that it is a variation of a joke adapted to Hans Moser. The Hammer story in Watzlawick's 'Guide to Unhappiness' is probably another variation. If he invented it, Alexander's gag writers could have "used" it as well. At least that is my spontaneous theory.

STEP 6: Plan action

→   Based on the challenges you defined in the previous step, what does your team, department, or organization need to do to improve current knowledge sharing practices?
→   Create an action plan that defines the actual steps needed to make improvements.

Suggested Methods

Sample exercise

STEP 1: Identify knowledge at risk

Collection knowledge developed by external researchers when viewing or researching parts of the collection.

STEP 2: Define the risks

REASON FOR SHARING: Use the opportunity to share existing collection knowledge that might otherwise never flow back into the archive. This knowledge can be used by researchers and others who wish to access and use the collections.

RISKS OF NOT SHARING: If no effort is made to bring knowledge about these collections into the archive, it will remain with the researchers. Information about collections may be available through project websites, but it is not reflected in the collection databases or collection documentation and is therefore not available to archivists.

STEP 3: Think of improvements

Use and share collection knowledge developed through external research projects or by external researchers.

STEP 4: Analyse

HOW IS THIS KNOWLEDGE SHARED? At the moment, it is shared through external websites or databases, or published research.

WHEN IS THIS KNOWLEDGE SHARED? This knowledge is shared when a project comes to a close.

WHO DOES THIS KNOWLEDGE NEED TO BE SHARED WITH? With the archivists and with the archive.

LEVEL OF KNOWLEDGE: In-depth knowledge generated through research in writing that can be used as reference material in the archive.

Step 5: Map challenges

→   We often collaborate with partner organizations (for example, university and other research partners) on larger research projects. At the beginning of a project, we ask researchers to provide us with collected filmographic and historical data on the collection elements they worked on. They should also share their research findings with us at the end of the project.
→   We sometimes have researchers come look at film material. They might spend days viewing films and making viewing notes. These viewing notes might provide useful information for us, yet they are personal, unstructured, and we don't have a place for them in the database.

STEP 6: Plan action

1.   Make the documentation of research in the internal database into a requirement for every research project conducted at the archive. This should take place at the end the project.
2.   Create a viewing form that allows for the archival staff to harvest collection knowledge gained during the viewing of film material.
3.   Ask if it is possible to make a photocopy of the viewing notes after the viewing.
4.   Ask students writing their theses on topics related to the collections to deposit a copy of their thesis in the library.

How to Share: Technical Knowledge and Skills

The knowledge and skills related to the technology and audiovisual techniques archivists work with are many and varied. They include knowledge of material characteristics, equipment, production processes, duplication technology, preservation technology, and conservation and restoration interventions. In addition, they refer to both theoretical and practical knowledge and the skills required, for example, for viewing, recording, repairing, duplicating, cleaning, conservation, and restoration. This knowledge and skills repository spans a range of technologies, from analogue film and audio to digital formats, as well as the hardware and software needed to use, manipulate, and archive digital media. This also means that technical knowledge and skills encompass both current and obsolete practices and formats. They also overlap with organizational knowledge, as they can both include technical work processes, but technical knowledge and skills relate to specific technologies and techniques.

STEP 1: Identify knowledge at risk

→ When you think about the concept of technical knowledge and skills, what kind of knowledge comes to mind first that is at risk of not being shared (enough)?

→ To help with this exercise, technical knowledge and skills have been divided into several categories. Select those that you believe should be developed or better shared within your organization:

- ☐ Material knowledge (types of materials, chemical composition, etc.)
- ☐ Media production processes (editing, lighting, etc.)
- ☐ Analogue restoration and repair skills

- ☐ Digital restoration skills for image and sound
- ☐ Understanding and use of machinery (e.g., viewing table, projector, scanner, washing machine, etc.)
- ☐ Understanding and use of tools (film repair tools, splicer, etc.)
- ☐ Analogue film development and duplication
- ☐ Video technology
- ☐ Hardware repair and maintenance
- ☐ Use and design of software programmes
- ☐ Preservation environment technology (vaults, climate control)
- ☐ Preservation interventions (freezing, baking, dealing with mould, deterioration, etc.)
- ☐ Other:

→ Discuss your answers with each other.
→ Choose one category to focus on in the next steps of this exercise.
→ Identify and describe this category of knowledge and skills applied to your institution.

Findings from research: Why is it necessary to share technical knowledge and skills?

To carry out daily preservation work: Practical skills and knowledge of audiovisual media technology are used in the daily practice of audiovisual archives. These can include assessing the material condition and audiovisual quality of audiovisual media, deciding on preservation needs, documenting the technical aspects of collection items, and performing analogue or digital reproduction/duplication. Further practices involve working on analogue and digital preservation and restoration, viewing and screening audiovisual formats, operating and maintaining equipment needed for inspection, viewing, reproduction and screening. They are also required for the improvement, modification and manipulation of all the above processes. Practical skills and technical knowledge are complemented and combined with knowledge of media and film history, the collections, the organization, and preservation. For example, when collections are processed and catalogued, this includes not only technical information, but also details about the content and preservation of the collection objects.

To create understanding necessary for access and use: Technical knowledge and skills are used, practised, and developed by those who work directly with audiovisual collection objects, such as audiovisual archivists, people working in print control, digitization, collection processing, film projectionists, restorers, and color graders. Yet, having an understanding or insight into the technology of audiovisual media and the material nature of collection objects can also be useful to those who do not work directly with the material. For example, an understanding of the technical aspects of collections can prove useful for curators and researchers seeking to access collections, since access depends on the technological facilities and material condition of the collection objects.

To generate awareness of the need for preservation: Understanding the material aspects of collection objects and their fragility – what can happen to collection objects, what is needed to care for them, and what is needed to make them accessible in the future – is necessary in order to understand the value of preservation. Sharing information about the material aspects of collections builds an understanding of the importance of preservation. This understanding needs to be communicated to the management, whose role it is to decide on preservation planning. Taking things one step further and communicating the importance of preservation to the general public and funding agencies can help create an awareness of the importance and value of audiovisual preservation in general. This can be a crucial factor when it comes to achieving recognition and gaining support. Promoting and sharing knowledge of the material artifacts and their possible deterioration can help you make your case and clearly communicate this value.

To collaborate and complement knowledge and skills: Technical knowledge and skills cover a broad, complex, and varied field, which means that the knowledge and skills needed for audiovisual preservation depend on collaboration. Not everyone who works in an audiovisual archive has the same level of knowledge and expertise about audiovisual technology. For example, people who work with materials and machinery used in preservation need to collaborate with and rely on engineers who maintain equipment. One of the interviewees mentioned that, in their preservation and digitization team, not everyone has the same level of expertise and skills but, all together, they possess the knowledge they need.

"You can't expect people who are experts for materials and interpreting those materials through machinery to be mechanical engineers, electronics engineers, physicists, digital engineers, and software specialists. You can't have all that in one person."

STEP 2: Define the risks

→ Now that you have read about the reasons for sharing technical knowledge and skills, which of these apply to your category of knowledge?
→ What are the consequences and risks if this knowledge is not shared?

STEP 3: Think of improvements

Now that you have defined the importance of sharing this knowledge and described the risks of not sharing it, what would you like to improve?

Findings from research: **How are technical knowledge and skills developed?**

Hands-on experience: Practical knowledge and skills related to audiovisual media technology are acquired through hands-on experience. Although practical knowledge may be preceded by theoretical knowledge or explanation, instruction, and demonstration, hands-on experience consolidates and helps retain that knowledge.

"It really all took place in practice. We had just a few books, basically books on cataloguing, but we didn't have any books about handling, we learned everything in practice, at the [viewing] table, where we saw how to review a film, how they cleaned it, how they measured it, how they saw the damage. In short, we learned all that at the table."

The time it takes people to learn depends on the complexity and difficulty of the technology or the material they are working with.

"[It took] two, three months before I could rewind a film properly. But to understand everything, to know every type of film, and to understand the condition of the film, maybe a year."

An important aspect of gaining technical skills is making mistakes and learning from them. It also takes time for people to gain confidence in practice and develop their hands-on skills. Practice and continuous repetition help people stay on top of things and are beneficial in preventing the loss of knowledge and skills.

"You need to work your way around so that you get to see how the machines work and react. You thread the film and then you wonder if you've done it right, and you go and fetch somebody and ask them if that's right. Or you see what happens if you do it wrong. I make mistakes and that's how I learn. I scratched a few films."

Exposure and explanation: Being exposed to technical processes brings understanding. Although instruction and practice are usually needed to learn how to undertake these technical processes yourself, exposure brings about a kind of understanding that might be enough for those who do not have to work with the media or equipment directly.

One interviewee mentioned that being exposed to photographic processing in the darkroom provided them with a basic understanding of how photography works. Another interviewee noted that they gained a good insight into the background of their work in a film archive through their exposure to the world of film-making and lab work from a very young age through parents who worked in the industry.

Explanation can also play a role in creating understanding. For example, if colleagues offer explanations about the technical processes and take you through all the steps, this creates an understanding of these processes.

Training, education, literature: Some knowledge and skills related to media technology are learned through education and training. These can be either external or internal – conducted through training offered by experienced colleagues. Learning about technical processes or figuring out how to perform new tasks can also take place through reading about technology and technical processes. When there is a lack of available training,

learning through literature may be the only option. For example, one can learn about how a machine or piece of equipment works through reading a manual. Documentation on practices and workflows (as described in the section about organizational knowledge) can be put to use so that people can familiarize themselves with the workflows and gain knowledge about the actual practice.

Findings from research:
Where can technical knowledge and skills be found?

Generation-specific: Because learning comes with practice and experience, people acquire knowledge and skills about the media formats and devices that are prevalent and common in their time. This means that knowledge and skills about different media can become generation-specific. For example, a younger generation that has grown up with digital technology may have more opportunities to learn about new media technology than the previous generation, which grew up with other media formats. Knowledge of older or obsolete technologies, such as analogue film or video formats, may be held by those who have gained knowledge and practice through experience at the time these technologies were in use. When it comes to older technologies, the expertise and knowledge held by people from the generation that has had active practice with or worked with these technologies is of paramount importance.

Literature and documentation: Literature on media technology, manuals, and documented work processes are more available now than was the case in the past. One interviewee mentioned that technical knowledge used to be transferred from experienced colleagues to new ones, but now the internet can also be used to look up information. In the past, fewer technical handbooks were available and information was generally more scattered.

Internal and external experts: Knowledge and skills related to audiovisual media technology include knowledge about the production and maintenance of different formats and technology. While within archives technical knowledge may be focused on the preservation of audiovisual media (knowledge of materials, handling of materials, use of equipment),

knowledge about the production and maintenance of equipment, the production and material and technical characteristics of media formats is not always available within the archive. Nonetheless, industry or freelance experts hold this knowledge and can be consulted. For example, archivists may know how to use the equipment for a particular video format and may even have basic maintenance and cleaning skills, but they rely on external experts or the manufacturer for repair, support, parts and service.

Theoretical or in-depth knowledge: The depth of knowledge and skills you should strive for depends on what you need for your job. For example, someone preparing film elements for digitization might be able to recognize different elements, but does not understand the analogue film production process and how these elements relate to one other. Some people have been trained to handle film material in a certain way, but do not necessarily know the reasons behind this. Lack of in-depth knowledge can also be the result of changing technologies. For example, as one employee mentions, there is no need to know much about engineering scanners when new scanners are much easier to handle.

STEP 4: Analyse

→ How is this knowledge shared presently? Is it shared verbally, through documentation, a combination of both, or in other ways?
→ When or (i.e., in what kind of situation) is this knowledge shared?
→ With whom does this knowledge need to be shared?
→ Not everyone needs to have the same level of knowledge. Describe what level of knowledge is required (ranging from general understanding to in-depth knowledge)?

STEP 5: Map challenges

→ The following paragraphs describe the most common challenges encountered in sharing technical knowledge and skills. Do you recognize any that apply to your category of knowledge?
→ Can you think of any other challenges?

Findings from research:
What are the challenges in sharing technical knowledge and skills?

Audiovisual media technologies are characterized by change and transition and changing technology can introduce feelings of discomfort.

Technical developments and changes in media formats are a constant factor in the field of audiovisual media, which significantly shapes the work of audiovisual archives. These changes are often driven by the industry and the relentless introduction of new media formats, playback devices, software, and so on. Changes in audiovisual media technology have a direct impact on how audiovisual media are preserved and made accessible, and require changing knowledge and skills. Technical change poses high demands and challenges because it requires employees to learn new technologies and adapt existing work practices. To keep up with these changes and to enable change, the knowledge, skills and the vocabulary connected to it, which is necessary to preserve and present audiovisual media, need to be constantly updated and adapted.

Technological changes can be intimidating. New technology, but also the changing terminology that comes with it, can be daunting to those who are not yet familiar with it. This is especially true when making the big leap from one kind of technology to another which, in the field of audiovisual preservation, took place with the transition from analogue and magnetic carriers to digital media. For many people, overcoming the reluctance to learn something new that did not even exist when you were growing up presents a great challenge. For example, not having grown up with digital technology and having to learn about it later in life can create a sense of reluctance and discomfort, and it may take extra effort to learn.

Sharing insights about new technologies with other colleagues helps get everyone on the same page when implementing changes. Explaining the "why" and "how" is important in this sharing process. Colleagues who are familiar with newer technologies can share their knowledge of these new systems and explain them in a straightforward way, using plain language.

"I probably tend to be a bit in the lead in everything that's digital because my colleagues are less comfortable with computers. I've had to train them in person several times, showing them how to do perform certain tasks on the computer. I've tried to create some manuals so that even if I'm not there, they can follow them."

Opportunities for learning through practice are becoming rare.

As media technology changes, so does the infrastructure, industry, equipment and the associated expertise. In the same way that media formats and technologies become obsolete or sub-standard, the support systems providing machinery and expertise enter a decline. This change results in fewer practical opportunities to learn how to work with certain formats and technologies. For example, one interviewee notes that it is impossible to learn enough about film printing techniques to compare to their colleague who was trained in a film lab, because there is no film lab around any more and therefore no possibility to learn about film printing and development in practice.

Even if an opportunity to work with older formats and technologies exists, it may be less likely for people to gain experience through practice. For example, running a film lab and printing on film has become so expensive that it is impossible for people to come to labs to practise, make mistakes, and possibly waste expensive material. Also, if analogue film projections are few and far between, there are fewer opportunities for people to train as projectionists.

"The young people who come here, they've never seen a videotape. The basic understanding of how this technology works, not so much in terms of the technology itself, but the handling, the feeling for the materials, the plastic, the film base, is missing. All that is something that requires, I think, a lot of time, if you don't have that experience growing up. I had magnetic tape in my hands because the cassette tapes broke in the cassette player and I had to use a screwdriver and pens to make the wheels turn. And if you've never done that in all your life, well, it takes some time before you will feel comfortable enough. Because you can break the tape, you can stratch it, you can do a lot of damage to it if you don't know how to handle it. So that is one big challenge."

Training and education are not available to all.

Knowledge and skills related to media technology can be learned through education and training, but training is not available everywhere. Industrial training may not be available for older technologies as the industry diminishes in size. Additionally, as technology becomes obsolete, so do training opportunities. Training programmes related to audiovisual technology such as film lab technology or projectionist training may have existed in the past, when there was a need to train people to work in the field, but are now unavailable as the fields have become significantly smaller.

Globally, there are few programmes in higher education that focus specifically on learning about audiovisual technology in relation to preservation. However, in most regions of the world, such programmes are not available. When formal training programmes offered by educational institutions or the industry are not available, people have to organize differently and find other forms of learning, such as training provided by colleagues or freelance experts.

Some colleagues are reluctant to train people in obsolete technology because there may be little or no future use for training in that direction.

"This is really training up for obsolescence. It's almost like teaching people how to mine coal when we know that coal is disappearing . . . "

The available expertise about older technologies is diminishing.

As media technology changes, the existing expertise quickly disappears, so that using, servicing, and repairing older or obsolete equipment becomes more and more of a challenge. The question is how long the experts will be around. The knowledge held by the few existing experts and labs is becoming increasingly valuable.

Even if the technology in question is not obsolete, relying on external expertise can be a challenge. For example, some interviewees expressed concern about the availability of local support for equipment repairs seeing as many companies have no representatives in their country or region.

"[We tried] just recently to find a replacement for somebody who's off sick. We were looking for technical competence – experience. This was our main focus, but it is becoming increasingly hard to come by. People with experience with two-inch and one-inch video tape machines are very, very rare nowadays."

"The people who really know the terminology are dying out. I know how to use some of the tables, but my knowledge is very limited. But people who used to work on those tables in editing, for example, they're all retired now. Apart from some experimental film-makers, no one uses this table any more, not in the way it was originally meant to be used."

Knowledge of older and obsolete technologies might be disappearing beyond the realm of archives (when it comes to the industry and freelance services), but archives still need this knowledge to keep playback machines running and continue to be able to preserve and access older media formats.

"It is a problem to not be able to get that machine repaired, because that means the tapes can't get processed as accurately or possibly not at all, depending on the label. It makes taking in new acquisitions difficult sometimes, because maybe we would like to keep the content but we don't have the equipment to view the tapes, so we don't necessarily know what's on them. Or if what's on them matches what's on the label."

Some archives tend to amass equipment and spare parts and train themselves to become hubs of knowledge about old or obsolete technologies in order to continue working with them without depending solely on external expertise.

Tacit knowledge acquired through exposure is difficult to transfer.

Part of the learning process associated with practice relies on exposure to the materials themselves. Exposure can lead to an accumulation of knowledge about a variety of materials, media, and practices. This kind of knowledge comes with time and requires experience. It can be very helpful in quickly recognizing and identifying objects and types of materials. For example, visual memory is employed in media identification and quality control.

Exposure builds up the ability to distinguish material characteristics and assists in developing an eye for detail. For example, after a period of working with different analogue film materials, one begins to recognize different kinds of film stock, or develops a memorized taxonomy of possible forms that film damage can take. Exposure helps us learn how to read objects and see them as artifacts carrying traces of the past. In turn, developing an eye for detail, quality, and format characteristics constitutes the basis for understanding the possibilities, specificities, and advantages of different media formats and kinds.

"When I did my degree, I was lucky that [the university] showed everything on 35 mm if they could find it. And I think this was amazing. I didn't even realize how lucky I was. Now, looking back, I realize this was unusual. And I think that really helped me see – I was not conscious of it at the time – but it really helped me develop a skill in understanding just what a print is, to some extent."

The knowledge gained through exposure to material can remain tacit when no effort is made to collect and (visually) document the encountered examples. For example, although the criteria for damage identification are nowadays much more standardized, subjective evaluations can still come about because what one person sees as a "minor" scratch might be "some" scratches in another person's eyes, and vice versa.

Embodied knowledge is difficult to transfer.

Practical knowledge is acquired and used directly in the process of doing, which can take the form of handling specific media formats or working with equipment and machinery. Knowledge related to practical, hands-on work can therefore become embodied. This embodied knowledge, developed through routine, provides one with confidence when it comes to doing practical work and makes their actions and reactions in working with materials and equipment easy and natural.

"[Making an assessment of analogue film is] just like riding a bike for me. I can remember I have those skills, but I will probably lose some. Eventually that stuff will just be gone too. You know, when I go and when new people come in, people who don't have those skills, who won't be using or maintaining

that equipment, [the knowledge and skills] will disappear too. I think that's a loss, not to be able to look at [analogue films] yourself."

It can be difficult to explain and teach this kind of embodied knowledge or to learn from someone who has it because it is hard to put this kind of knowledge and these skills into words. In addition, personal preferences, combined with a person's ability to share their knowledge, strongly determine practised ways and methods of sharing. For example, some people may not be able to talk about what they do, but need to demonstrate it in order to transmit their knowledge. Others may want to combine instruction with demonstration when sharing practical knowledge.

Written resources are not available to all.

Although technical literature on audiovisual preservation is becoming increasingly available, it is still necessary to gain access to it. The challenges to accessing literature may be having difficulty finding a manual for an obsolete piece of equipment, a lack of knowledge about the existence of potentially useful resources, and language, because literature may not be available in all languages.

"Nowadays, with the internet, I think information is everywhere if you want to look for something. But you have to be able to read it or understand. So, I think that people's level of understanding of English is important."

Step 6: Plan action

→ Based on the challenges and opportunities you defined in the previous step, what does your team, department, or organization need to do to achieve your goal?

→ Create an action plan that defines the actual steps needed to achieve your goal.

Suggested Methods

→ Capturing knowledge through oral history —— *pages 158–162*
→ Organizing technical workshops —— *pages 167–168*

Sample exercise

Step 1: Identify knowledge at risk

Hardware repair and maintenance: the maintenance of film viewing and winding tables.

Step 2: Define the risks

Reasons for sharing: Knowledge of the maintenance of film editing tables and rewinders needs to be shared in order to ensure the smooth performance of daily preservation tasks. People who work with these machines on a daily basis need to know how to keep them in good condition, that is, how to handle them in a way that will ensure their longevity. However, there should be more than one person in the organization who knows more about the maintenance and repair of viewing/editing and winding tables.

Risk of not sharing: The risk of not sharing this knowledge, or not having this knowledge, is that we will not be able to maintain and repair our equipment and do our conservation work without it. Since we do not know how long these machines will be in production, we cannot count on industry or external experts for repair and maintenance.

Step 3: Think of improvements

Ensure that all colleagues who use film viewing tables and rewinders are developing the knowledge of how to maintain them.

Step 4: Analyse

How is this knowledge shared? Knowledge about the maintenance and repair of machinery like viewing tables and winding tables is based

on experience, i.e., hands-on experience. Knowledge is generated when failures appear and are fixed or remedied within the archive. Manuals, blue prints, and technical drawings of technical equipment can help as a reference or may even be indispensable.

When is this knowledge shared? Not at all, or only during moments of absolute necessity.

With whom should it be shared? This knowledge lies with people who used to repair and maintain the machines in question for a living. Very few of them remain. In our local context, there is only one person left with a great deal of such knowledge. At this moment in time, this knowledge is shared with one person who is a part-time employee, but only sporadically, and mainly verbally and based on questions or concrete problems that crop up. The knowledge and skills are not shared structurally.

Level of knowledge: Everyone who works with viewing and winding tables should know how to handle the equipment so that it has a long and happy life. Colleagues working with these tables should also be able to repair small things (e.g., lamp replacement, fuse replacement).

Ideally, a few people within our organization should have more in-depth knowledge and skills necessary to repair and service viewing and winding tables.

Step 5: Map challenges

→ Technology is changing – winding and viewing tables are used less and less, which means repairing them is becoming a difficult issue. The necessary knowledge and skills for the service and repair of these tables are disappearing. There are also less and less people who have worked with this equipment in other capacities, such as editors or projectionists, who come to work at the archive with prior experience in maintaining tables.

→ The kind of knowledge and the skills necessary to repair and maintain this equipment are largely based on experience, and there are less chances to gain this experience due to (almost) obsolescence.

→ Available expertise in local contexts is diminishing or becoming impossible to locate. External expertise might exist, but is untraceable.

→ Access to literature on these machines is partly available and gathered within our archive, but by no means complete. We know that the senior mechanic currently in charge of repairing this equipment has a collection of documentation related to the machines that he might want to donate.

→ We are not aware of any literature, sources or expertise currently being shared through the international community of archivists, film editors, and labs, but there might be a resource available that we are unaware of.

Step 6: Plan action

1. Find out where knowledge and skills are documented or located. Are there any online resources, online communities such as listservs that provide help and expertise when needed?[5]

2. Organize an internal workshop on the proper care and use of equipment and tools, clearly communicating to everyone that maintaining and caring for the equipment is becoming increasingly important since these items are not being produced on a large scale or at all, etc.

3. Create a shared inventory of the available equipment in the archive and log the service and repairs to each of the viewing benches and winding tables.

4. Find out if it is possible to invite an external expert who could give an introduction to the structure and mechanics of winding tables and viewing benches.

→ 5 Mailing lists through which communities ask questions and share knowledge.

Point of Departure II
→ **Scenarios**

Audiovisual archivists engage in ongoing processes of knowledge sharing in a variety of situations – this is part of their work. While a great deal of sharing occurs naturally, **certain situations require careful consideration and a tailor-made approach**. In order to provide a structured framework for discussing knowledge sharing in different contexts, this chapter outlines four scenarios in which a special approach to knowledge sharing is particularly relevant: **at the beginning of employment, during daily work, at the end of employment, and when knowledge has left the organization**.

Each of the four sections provides a summary of the research findings that offer **insights into the most significant patterns** discovered during the research. The research findings are accompanied by exercises, which comprise the following steps:

STEP 1: Reflect on the scenario – The exercise begins with brainstorming about how the scenario relates to the reader's organization. The goal of this step is to outline an example that is typical of the scenario and represents one of the challenges of knowledge sharing in their organization.

STEP 2: Think of improvements – Once one example has been outlined, the next step is to think of possible improvements to knowledge sharing.

STEP 3: Analyse – In this step, readers will analyse the knowledge involved in the example they have chosen and establish who possesses it.

STEP 4: Look at the scenario from different angles – This step encourages readers to look at their example from different perspectives and identify the characteristics, issues, and circumstances in their scenario that have a direct impact on knowledge sharing.

Step 5: Plan action – After gaining an idea of what needs to be improved and having identified the characteristics, issues, and circumstances in the scenario, the last step is to create a road map for improving knowledge sharing and plan concrete actions.

These exercises are specifically designed to help audiovisual archivists assess knowledge sharing in their particular situation and encourage them to develop an action plan. To assist the readers in developing their own plan, the appendix following every final step provides **suggestions for potential methods** that can be used with each scenario. Readers can refer to the next chapter, "Point of Departure III: Methods," for more details on these methods. In addition, **sample exercises** are provided at the end of each section as a reference or source of inspiration for conducting these exercises.

Before you start an exercise:

→   Choose the scenario you want to work on.
→   Decide whether you want to do the exercise individually or with a small group of colleagues.
→   Allow at least two to three hours for the exercise.
→   Organize several large sheets of paper and pencils or pens to write down and map the steps.
→   To get the kind of result that will be of most use to you, try to avoid general answers and think of concrete examples instead.

When you are done with the exercise:

→   Think about what you want to get out of the exercise. Ideally, the result will be a written document that summarizes the knowledge at risk, the characteristics, issues and circumstances of knowledge sharing in a particular scenario, and contains a proposal for solutions and methods that will help you improve knowledge sharing. This paper can be presented to your management, funding body, or whomever else you need to convince of the importance of knowledge sharing methods.
→   After you have completed this exercise, set a date for a follow-up meeting where you will discuss the progress you have made in applying the steps you defined.

Knowledge Sharing When Starting Employment

Starting a new job in an audiovisual archive is one of those moments when knowledge sharing is needed. It is an important moment in a newcomer's learning journey as they begin to acquire knowledge about the job, the organization, and the collections they will be working with. At this moment in time, knowledge sharing is a two-way process – newcomers learn, but they also contribute their knowledge and skills to the collective sum of the team's knowledge and skills. Given the importance of this moment, the colleagues involved as well as the management have a significant role to play in the methodological transfer of knowledge. The knowledge that needs to be shared at the beginning of the job may include organization-specific principles, policies, and standards. It will also include administrative knowledge, a general idea of the make-up of the collections, knowledge of the physical layout of the collection environment and the structure and organization of the collection storage. The newcomer will also need to learn how to navigate the documentation (understanding what types of documents there are, how documentation is organized, how to access documentation), and colleagues (how to communicate with colleagues, learning who holds what kind of knowledge, and how to reach out to colleagues).

Step 1: Reflect on the scenario

→   How is knowledge shared in your organization when a new person arrives? Individually brainstorm about what comes to mind when you think about this scenario.
→   Share, compare, and discuss each other's views, then choose and describe one thing that typically does not go well.

STEP 2: Think of improvements

→ In the example you have chosen, what can be improved about the process of knowledge sharing?

Findings from research:
Types of knowledge

The approach taken to acquire knowledge in a new organization will depend on the types of knowledge that need to be acquired. **Different types of knowledge have different learning curves.** For example, although someone may be able to learn how to navigate the vaults and how to search collections using the database **right from the start**, there are other types of knowledge and skills to be acquired. Knowledge of the collections, complex technical knowledge and skills, and an understanding of the context of past preservation practices **develop only with time and experience**. One interviewee explained the development of a deeper understanding as follows: *"Although you can learn skills like film handling, as well as those practical skills, and the skills of presenting and researching, there is also the knowledge, the deep knowledge of the actual collections. And that is something that develops over time. Your understanding and your way of working with a collection is something that develops over time as well. This kind of learning on the job and this kind of experience are very important."*

The nature of knowledge not only requires an appropriate time frame but also calls for an **appropriate method for sharing** it. Some knowledge and skills are difficult to teach with words alone and require **demonstration** by experienced colleagues, such as the knowledge required for film identification. Others require a **combination of instruction and hands-on practice**, such as learning how to handle film and video formats or how to operate equipment. The type of knowledge furthermore determines how much guidance is needed, and whether the person in question can acquire the knowledge and skills **on their own**. They may need to be **taught by others and require explanations**, and it also may happen that **these two methods need to be combined**. For example, the logic behind a particular audiovisual vault system may be difficult to understand without any guidance or explanations from more experienced colleagues.

STEP 3: Analyse

→ What types of knowledge and skills are at stake in your example?

→ Who has this knowledge and these skills? Alternatively, where is this knowledge documented?

→ What are the appropriate methods of sharing this knowledge and these skills?

STEP 4: Look at the scenario from different angles

→ The following pages explain some of the aspects (characteristics, issues and circumstances) of knowledge sharing that appear when starting a new job, as established by research. You can use them as a lens through which to view your own knowledge sharing example. Do you recognize any of these aspects? How do they apply to your example?

→ Can you think of any other aspects?

Findings from research:
New employees' level of experience and background

Every new employee brings a **unique set of knowledge and skills** to the organization. The amount of learning required by new employees varies according to their previous knowledge and experience. **Prior knowledge might be gained through education**, such as academic studies, internships, training, seminars, workshops, and/or **work experience in the field**.

There is a **growing interest in educational programmes focused on audiovisual preservation**. Generally speaking, the study opportunities in this field have gradually increased.[6] In the past, where such programmes and training opportunities were scarce, archivists had to largely rely on **on-the-job training or self-education** in order to acquire knowledge and skills related to audiovisual preservation and archiving. Having an academic background in this area can help people acquire a conceptual understanding and approach to audiovisual preservation, as one interviewee points

→ **6** A list and description of currently available academic programmes on film archiving, curating, and programming can be found through the website of FIAF.

out: *"Documentation is not a fun thing to work on, but it's so important. I think the newest generation of archivists and audiovisual archivists understands that because their training has included information about that."*

Despite an increase in educational programmes related to audiovisual preservation, there is still only a **limited number of academic programmes or specialized courses available worldwide**.[7] One of the interviewees expressed their concern regarding the lack of educational opportunities in their region: *"I'm not really an archivist either. It's not what I studied, so I'm learning it as I go along. And I don't have a support system for this training – not even for me, and I am very interested in being an archivist. I don't have support in the sense of getting training or taking courses, something like what librarians can do – to learn about audiovisual materials and cataloguing. For these things you have to go to the international scene, which is possible, but it costs money. I think the situation in [country name] is very alarming in terms of succession."* For many archivists it is common to have a **background in fields other than audiovisual archiving**, such as information sciences, humanities, or film-making, and they learn and adjust their knowledge on the job.

Newcomers with an academic background but no prior working experience encounter the **challenge of translating and applying theoretical knowledge to practice**. They may have difficulty adjusting their expectations and finding a common language with their colleagues **when theoretical concepts do not match the reality of the situation**. This can make it difficult to find common ground, as the following example illustrates: *"I think it was difficult to find a similar language because I came from academia, and I used to use many words that were never heard in the archive. I wanted to conceptualize and [I asked things like]: 'Where is your collections guide?' And they said: 'What collections guide? What are you talking about?'"*

Individuals who are new to the field have more to learn than those with prior work experience. However, prior knowledge and experience notwithstanding, **every newcomer must acquire and develop organizational and collection-specific knowledge** when starting a job, as this example illustrates: *"Most newcomers do have a background in museum studies and know some of the basic processes, so this is something they do not have to learn when coming to an organization, but they do need to learn about the objects within the collection."*

➔ **7** For an elaboration on the limited possibilities to acquire and develop technical knowledge and skills, see the subsections *"Opportunities for learning through practice are becoming rare."* on page 80 and *"Training and education are not available to all."* on page 81.

Findings from research:
Access to knowledge of colleagues

When newcomers join a team, they are typically introduced to their colleagues, including those they will work with directly and those from other departments. The **absence of these introductions** can be challenging, leading to potential **gaps in a newcomer's organizational knowledge**. This can leave newcomers unaware of individual responsibilities and unsure of where to go with questions.

Newcomers usually acquire most of the knowledge they need for their jobs **from their predecessors or colleagues working in the same area** who already have and use the knowledge they need on a daily basis. If there is **no one to turn to for guidance, the situation can be challenging** for a newcomer who is not yet equipped for their tasks and lacks the necessary specialized knowledge, as indicated by one interviewee: *"In my first year, I alone was responsible for duplication. And I had so many concerns about doing this by myself because it was a very important thing to do. There are so many ethical issues involved in this that I sometimes felt that I was left alone with that."* It can also be challenging for newcomers to have to depend on **colleagues who are reluctant to share and have a protective attitude towards passing on their knowledge and skills**. This attitude obstructs access to their knowledge.

Another challenge people may face when starting a new job arises when it comes to **acquiring the knowledge and skills needed to perform tasks that have not been reviewed or updated**. Working practices may have been developed over time, and if they have not been reflected upon and evaluated, potential weaknesses may not have been identified. As a result, it may take time for a newcomer trying to learn these practices to realize that **they have in fact acquired incorrect or outdated methods**. The following example illustrates this challenge: *"What they were doing at the time, for example with the descriptions, with entering the data into the database, was in many ways completely wrong. They didn't have the right rules in place. For example, whatever kind of material they were documenting – raw material, news coverage, documentaries, different things – they were annotating it as a documentary. And I followed along, I did it like that. Then it took me months to realize that it wasn't right, so we corrected it.*

So, if something is not set up right in the beginning, you learn it the wrong way. And there is no one to tell you that it is not good, because they are not aware that it is not good."

Findings from research: Newcomers' learning attitude

Every person learns differently. Moreover, depending on the type of knowledge they are learning, some people benefit from **close super-vision and guidance**, while others prefer to have more **autonomy and flexibility in their learning process**, as indicated by one of the interviewees: *"There is a really big difference between people. Because some people just want to have tasks and do those tasks. And some people want to feel more . . . I don't know if agency is actually a good word for this – but they want to have a more active role in what they are doing and how they are doing it."* Some may find it easier to absorb new information when it is **explained by a colleague**, whereas others may acquire information bet-ter through **reading manuals and guidelines, through observation, or hands-on practice**. As the following example shows, some newcomers are aware of their own preferred learning style and are explicit about it when starting work: *"That was part of the discussion between [co-mentor's name] and me, and in the end with the trainee too. Because he himself said: 'Please, I'm a hands-on person. So I need to do things, it would be best if I can do things.'"*

A person's learning style can also depend on whether they prefer **a variety of tasks or clear tasks with little variation**. Those who enjoy new tasks and challenges in their work tend to have a **natural inclination towards acquiring new knowledge and skills**. One interviewee noted that it was relatively easy to acquire new technical skills because of their tendency to learn continuously: *"I hadn't done much with film before. Really, I never touched a film reel before I came here. It was always videotapes, or maybe a bit of audio tape. I enjoyed it. I'm somebody who always wants to learn new things, I don't like sitting, doing the same thing all the time. I like to learn new things or do things that I haven't done before or haven't done for a long while. I like a bit of variety, a bit of a challenge."*

When starting a new job, one of the primary ways of learning is **asking questions**. Posing questions shows an individual's **active interest in tap-ping into the knowledge of their colleagues and demonstrates their curiosity and eagerness to learn**, as the following example shows: *"They didn't know what to do with me. And I was wild enough to take advantage of it and basically say, 'Listen, I've got nothing to do here. The guy who hired me is gone. And nobody knows what to do with me. I want to know how to do all that stuff. Can you help me?'"* Asking questions is also a way of **making sure that one is performing newly learned tasks correctly and learning how to improve one's work**. Seeking knowledge through asking questions is a tool **not everyone feels at ease** with. Some feel hes-itant or uneasy about asking questions because they are **afraid of being perceived as uneducated, or because of their personal traits, such as shyness**. In contrast, others exhibit a greater level of comfort when it comes to learning through asking. Asking is an important skill to have in the learning process, as indicated by one interviewee: *"I think it's a skill in itself, it's one of the crucial skills you couldn't teach somebody – to be curious. If you're interested in something, just go for it."*

There can be a **correlation between a new employee's career stage and their willingness to learn**. An interviewee with a long career in the field and extensive prior experience mentioned that they were not motivated to seek out new knowledge at the beginning of their most recent pos-ition: *"I don't know how to do anything else, and the strength needed to do something like that somewhere else, I also didn't have that. So I said, 'I can only do something with film,' and I was glad that I then got into the archive and that I stayed with what I had actually been working with basically my whole life."*

Findings from research: Access to documentation

The extent to which documentation is organized, understandable and accessible to newcomers has a direct impact on the knowledge sharing pro-cess. For example, new employees can face difficulties because **workflows and responsibilities are not documented**, which can cause confusion and make it difficult for them to understand their tasks and responsibilities, as

well as those of their colleagues. This lack of clarity at the very beginning of a job can limit their ability to acquire organizational knowledge and **understand who to turn to with questions, what knowledge is necessary for their role, and what workflows and standards to follow when performing their work,**[8] as illustrated by the following example: *"There is something good about coming somewhere and knowing what the standards are. I think this is the main thing that was really missing at [organization name]. There were no standards, there were no ways things should be. And if you are learning, you want to know how things should be. You want to have something to hold on to, some guidelines. You try to measure your work by them: you know how you are doing because you know this is how it should be, and you try to do it like that. And if something like that isn't there, then you start to question everything. Is it necessary to do it this way? Why can't it be done another way?"*

In some organizations, there may be a **lack of standards and consistency** when it comes to documentation practices, which can create **difficulties when it comes to understanding existing documentation**. For instance, colleagues working with loan requests may use very individual methods for documenting these requests. This can create difficulties for **new employees trying to understand the proper methodology** for documenting loans, as the **existing records may only make sense to those who initially created them** and not to others.

Newcomers may also find themselves in a situation where the **documentation is not accessible to them**, which can be a challenge. Inaccessible documentation may be due to **colleagues who are not forthcoming in sharing information** or because colleagues left behind disorganized documentation and are **no longer available for consultation**.

➔ 8 For further information on the importance of sharing knowledge related to the organization of the workplace, see *"Why is it necessary to share organizational knowledge?"* on pages 31–33.

STEP 5: Plan action

→ Now that you have gained an insight into your knowledge sharing example, it is time to think of a plan of action. How can knowledge sharing in your example be improved?
→ Discuss the concrete steps that are needed to improve knowledge sharing. Identify who needs to be involved and assign responsibilities.

Suggested Methods

→ Planning an induction process —— *pages 138–141*
→ Mentoring —— *pages 142–144*
→ Planning a period of overlap —— *pages 155–157*

Sample exercise

STEP 1: Reflect on the scenario

When new employees start work in our organization, where only a handful of people work in the archival department, they are taught and introduced to the job by colleagues with 20+ years of experience at the organization. These colleagues developed preservation workflows on their own, and these might not meet current standards and need to be updated. **The danger is that new employees are taught false or outdated working practices.** Another challenge is **finding ways for new colleagues to bring in new knowledge based on prior experience or education and thus introduce new ideas about changing preservation workflows**.

STEP 2: Think of improvements

→ Preventing outdated knowledge from being passed on to newcomers.
→ Critically evaluating existing preservation workflows, i.e., the knowledge of long-term colleagues prior to introducing newcomers.
→ Finding ways to evaluate existing workflows together with newcomers and taking the opportunity to invite new ideas and input.

STEP 3: Analyse

→ **What types of knowledge and skills are at stake?**

▷ Knowledge related to cataloguing standards.

→ **Who has this knowledge and these skills?**

▷ Long-term colleagues know about cataloguing standards from their own practice; the newcomer might know about cataloguing standards through education.

→ **What are the appropriate methods of sharing this knowledge and these skills?**

▷ From experienced to new colleagues: demonstration accompanied by explanation, doing-it-yourself.
▷ From newcomers to experienced colleagues: explanation of new cataloguing standards learned elsewhere or acquired through academic studies or training.

STEP 4: Look at the scenario from different angles

NEW EMPLOYEES' LEVEL OF EXPERIENCE AND BACKGROUND
Newcomers might have acquired education in the field of audiovisual preservation, in contrast to the long-term colleagues who come from other fields and have mostly learned on-the-job. Due to different backgrounds (academic vs. hands-on), there have been challenges in finding a common language to speak about the preservation activities, particularly about documentation standards and practices. This might also influence the communication about preservation workflows, since ideas about how to do certain things might be approached from different perspectives.

ACCESS TO KNOWLEDGE OF COLLEAGUES
Colleagues with a longer tenure have generally been open to sharing their knowledge, but since some of their knowledge about documenting collections has become outdated, a newcomer must critically evaluate the information that is being passed on to them.

NEWCOMERS' LEARNING ATTITUDE
When a newcomer is skeptical about outdated knowledge passed on to them by their colleagues, problems in communication might arise because the newcomer will be less willing to take in the knowledge that they are being taught.

Access to documentation

→ Long-term colleagues created and organized most of the documentation and have been the only ones using it until the arrival of newcomers. Some of the records were not made with the idea in mind that anyone else might ever have to use them. As a result, a newcomer can have trouble understanding how to navigate through the system of documentation without the guidance of their colleagues.

→ There are gaps in the documentation. For example, there is no documentation on how to navigate the different forms of documentation. Long-term colleagues either never saw the need to document some of their unique knowledge, or they didn't find an appropriate place for it in the existing documentation system.

Other factors

→ The management is not aware of the fact that certain documentation practices are outdated.

→ Colleagues who have always worked with paper documentation might find it challenging to become familiar with the use of digital tools in order to improve documentation practices.

Step 5: Plan action

To improve knowledge sharing when a newcomer joins the team, management can:

1. Invite colleagues to collaboratively prepare a mentorship plan before the newcomer joins the team.
2. Discuss the plan with colleagues, talk about their roles in the mentoring process and the areas of knowledge they will share with the newcomer.
3. Review the documentation of the existing preservation workflows together with colleagues.
4. Introduce the newcomer to the team and make sure everyone is familiar with and agrees with the mentorship plan.
5. Make sure the newcomer has access to the workflow documentation.
6. Organize meetings with experienced colleagues and the newcomer

on a regular basis, discussing and evaluating the progress of the introduction and mentorship plan.
7. Invite the newcomer to give feedback on the preservation workflows, encourage new ideas and improvements.
8. Make sure the changes in the existing workflows have been documented.

To improve knowledge sharing, a newcomer can:

1. Follow the mentorship plan, pose questions to colleagues, observe.
2. Use documentation to complement knowledge acquired from colleagues.
3. Make their own notes, come back to them to recall and review acquired knowledge.
4. When they notice a mistake in documentation or verbally shared information, communicate that to colleagues and management and update documented information.
5. When they have an idea about possible improvements to the existing workflows, communicate that to colleagues and management. Find ways to implement changes together.
6. Share information related to updated workflows with colleagues through daily practice and dedicated meetings.
7. Update the existing documentation with information about workflow changes.

To improve knowledge sharing, experienced colleagues can:

1. Prepare a mentorship plan together with management, think about the types of knowledge that should be shared with the newcomer.
2. Collaboratively review the documentation of the existing preservation workflows, ask colleagues for feedback.
3. Introduce the newcomer to the workflows and documentation, answer their questions.
4. Discuss the newcomer's ideas for improving the existing workflows and work together to find ways to implement changes.
5. Learn about the updated workflows.

Improving Existing Systems of Knowledge Sharing during Daily Work

Sharing knowledge is an ongoing process. It happens informally within each organization, through regular communication and simply working together. Knowledge is also shared outside of working hours, for example, during breaks or through meetings in free time. In addition to informal methods of sharing, there are formal means of sharing knowledge through shared documentation and methods of written and oral communication, such as emails, reports, meetings, and workshops. Certain situations can expose the shortcomings of the knowledge sharing systems, such as instances of miscommunication, uncertainty about who has a certain kind of knowledge or where to find it, unfamiliarity with the activities of other departments, and challenges in accessing information in the documentation. Improving current knowledge sharing systems and introducing formal knowledge sharing methods can enhance communication and make it easier to access and use existing knowledge. This includes knowledge about daily activities such as, for example, how work is organized in a particular department, the responsibilities of other colleagues, or what projects are in progress. However, this can also refer to knowledge that provides a deeper understanding, such as collection knowledge, knowledge about past preservation activities, and historical knowledge related to the collection and the organization.

STEP 1: Reflect on the scenario

→ How is knowledge shared within your organization during daily work? Individually brainstorm about what comes to mind when you think about this scenario.

→ Share, compare, and discuss each other's views, then choose and describe one thing that typically does not go well.

STEP 2: Think of improvements

→ In the example you have chosen, what can be improved about the process of knowledge sharing?

Findings from research: The sum of a team's knowledge and skills

Sharing knowledge during daily work depends on the **diversity of experience within a team**, and on how **each team member's knowledge complements that of their colleagues**. When a team consists of individuals with different backgrounds, experiences, and areas of expertise, they can complement each other's knowledge by **learning from each other on the job and filling in the knowledge gaps that arise during their work**. The following example illustrates the benefits of having a diverse team in terms of experience and knowledge: *"You used to have people in their mid-careers, people who had been there a long time, people who were experts in military, worked in AV, people who were experts in feature film acquisition . . . You had a great variety of people you could draw on if you had a question about broadcasts or history, you could go to [colleague's name], go to whoever the archivist in charge of this was and say: 'Is it your file? Can you tell me about it? What was the history of it?' That kind of thing is important to share amongst your colleagues, it's part of your learning on the job."* In contrast, the possibilities of learning on the job can be limited when one **cannot rely on the knowledge of colleagues**, as seen in this example: *"I realized that they don't know the difference between Super 8 and 8 mm film, and they are not interested in learning about it. They know a lot about the content of the collection, the elements. But they don't really have a lot of technical knowledge related to film material that I needed for my work."*

A team of colleagues with different areas of expertise can be valuable, not only because they can be called upon for assistance when needed, but also because **their unique knowledge and skills can complement those of their colleagues in collaborative projects which may become even more necessary during times of changes**, as the following example illustrates: *"And given what's happening now with digital technology … The convergence of everything means that our IT people, our preservation people, our curators, and our cataloguers are all becoming part of a larger, increasingly interacting group than they've ever been in the past."*

Diversity of backgrounds and experiences can result in **different perspectives** on work, the way it is done, and the decisions that are made in work practices. Sharing different perspectives can **stimulate interesting discussions and learning**, as one interviewee noted: *"Sometimes we didn't have the same views, and it was very interesting. What I didn't want when I made this training is for all the people to adopt the same methodologies, because they all came from different backgrounds. Because if the methodologies are good, I think there is no point in making them fit a single rule. I learned little by little that it's quite important to respect this difference. And it was very nice. Sometimes we had some discussions about different opinions on a case study. And that's a good way to train people to see the different possibilities."*

Complementary knowledge can help colleagues **broaden their perspective on work**. The following example shows how the sharing of collection and technical knowledge between two colleagues working in the curatorial and technical department, respectively, helped both gain a **better understanding of the collection**: *"We work together to have a full picture. For example, if you ask the head of the film [department], he has a full picture, including the technical side. If you ask me about the content of the series, I have a lot of tools that my predecessor left me, I know how the series came in and what the series is about, what the most important titles are and what the preservation status is. But we have to work together to see the collection as a whole, from a content point of view and from a technical point of view."*

STEP 3: Analyse

→   What types of knowledge and skills are at stake in your example?
→   Who has this knowledge and these skills? Alternatively, where is this knowledge documented?
→   How do other colleagues gain from having this knowledge and these skills? Try to be specific and give examples.

STEP 4: Look at the scenario from different angles

→   The following pages explain some of the aspects (characteristics, issues and circumstances) of knowledge sharing during daily work, as established by research. You can use them as a lens through which to view your own knowledge sharing example. Do you recognize any of these aspects? How do they apply to your example?
→   Can you think of any other aspects?

Findings from research: Access to knowledge of colleagues

This access largely depends on your level of insight into colleagues' areas of expertise as well as an understanding of their responsibilities and the projects in which they are involved. Transparency about who is who and who is responsible for what gives **insight into where to look for knowledge**. This organizational knowledge, which is necessary to navigate the organization's knowledge terrain, can be obtained through **documentation** as well as **verbal communication**.

Successful communication within a team is closely tied to the **overall culture of knowledge sharing**. A knowledge-sharing culture is characterized by a general willingness to share: colleagues are approachable and willing to share information related to their work activities, answer questions, demonstrate their skills, provide explanations their colleagues ask for, and discuss ideas. One interviewee illustrated the **collaborative atmosphere** in their organization by describing a meeting where projectionists and colleagues from the print inspection came together to discuss their work

processes and exchange views on what could be improved: *"We had a meeting with the projectionists, where we talked about their work and they talked about their work and we tried to find a way to do things better. So yes, it's a very open atmosphere!"* In teams where **communication and collaboration are scarce**, people may have problems accessing their colleagues' knowledge, as one respondent noted: *"The feeling we had was that everyone was on her or his tiny island and just doing her or his job without the habit of having to share too much with others."* Sharing knowledge with colleagues during daily work also depends on **how receptive colleagues are to new knowledge**. One interviewee described their experience of having difficulty discussing new ideas for improving existing workflows with colleagues: *"I really enjoyed learning and reading about it and checking how things are done elsewhere. But, for example, I could never discuss it with anyone from [organization name]. When you have an idea about something and you think it might be good, you have nobody to reflect on it. Maybe you just need to say it out loud, but there is nobody to listen to you."*

Individual attitudes towards sharing also affect the accessibility of colleagues' knowledge. For example, a protective attitude or gatekeeping of knowledge poses a challenge for accessibility. This attitude may be the result of an unfriendly work culture, changes within the organization, such as restructuring and downsizing, or a fear of being replaced. This may bring about a **reluctance to share knowledge, or knowledge may be partially shared**, as one interviewee noted: *"Sometimes I fear that they are aware that they are only sharing a part of their knowledge, because they fear they might be replaced if they share everything, that they are of no value any more."* Colleagues may be reluctant to share certain information because, over time, they have become accustomed (due to historical/political circumstances) to be cautious about sharing **potentially sensitive information**, as one colleague observed: *"Especially during socialism, they were trained not to say anything, so in their mind it is still 'I'm not supposed to say anything,' and it's so difficult to change that. We had so many things in the collections that were hidden so that they wouldn't get destroyed during the totalitarian regime and very few people knew about that. So it's very much connected to our history and to the regime. It's partly a historical thing, a generational thing."*

Findings from research:
Knowledge sharing between departments

Colleagues typically share knowledge about their daily work through **on-the-job communication**. Much of the knowledge is shared through collaborative projects and spontaneous conversations. The **physical layout of workspaces** plays a critical role in facilitating these **informal discussions**, as proximity to colleagues' offices makes it easier for colleagues to reach out informally: *"There were two rooms, with just an open door between us. And when I had a question, I would just give a little shout and he would answer and come to me. It was very nice because there was always this paper on his door that said: 'Please disturb!' That was very nice."* Sharing knowledge **between colleagues from different departments** through daily communication can be difficult. This is especially true when people work at different locations and have limited opportunities for informal knowledge exchange, **which requires additional effort on their part to reach out to each other**: *"Yes, we collaborate on a daily basis, but we are not sitting in the same room. It's a bit tricky because sometimes you would just want to go to the other room and say: 'Sorry, hang on, what's the problem here?' But you can't really do it, you have to send an email or make a call. So the collaboration is complicated because we are not sitting in the same place."* Problems with interdepartmental communication may be **more common in larger organizations**, as the following example illustrates: *"Our main problem, as is always the case with big institutions, is communication. We don't communicate enough with our colleagues. And that's partly because we're on different sites. This is a very common problem in this kind of organization. They're big, they're complicated, and there's a lot of very detailed work going on. And we need to talk to each other far more, but we can't because of the distance."*

Without **regular meetings or other dedicated knowledge sharing opportunities** that can help bridge the gaps created between colleagues working in different locations, it is difficult to share knowledge between departments. Lack of interaction can result in **limited insight into the activities of other departments** and missed opportunities to gain a better overview of archival activities. For example, vault managers and archivists may not even know what happens to collection items after they leave their

facilities for digitization because their scanning department is located elsewhere, as indicated by one respondent: *"When it comes to knowledge, I wish there was more collaboration. Because I spent three years working in the [collection building name]. I came here [to the other facility,] after that, and it was only then that I found out how they were digitizing the material. I never knew. I knew something, but the whole process, the whole workflow, I only found that out when I started working here. There wasn't much cooperation when it comes to knowledge. But with my colleagues at the [collection building name], yes, a lot."*

Findings from research:
Documentation systems

Knowledge can be shared and preserved through existing documentation systems, depending on how organized, understandable, and accessible these systems are. A **lack of standards and consistency in documentation practices can make documentation inaccessible**, as colleagues may create and organize records in ways that only make sense to them, but not to others. In such cases, the documentation structure may need to be clarified by the colleague who created it, as the following example illustrates: *"I found out after all these years, after countless conversations with [colleague's name], that if in the catalogue it says [keyword] next to it, it means this, and if it says [keyword], it means that. And I know that this information is not documented anywhere but I know it now because [colleague's name] told me."*

When **different departments or colleagues use different documentation systems** it is difficult to ensure that information is shared consistently across departments, as illustrated in the following example: *"You get different databases in different departments, and different masters and different sets of knowledge in different departments. Which is a good thing and a bad thing. But when it comes to knowing what is the best material to use for a film, it's not good. Because you can end up going to see a film at [organization's cinema venue], and it will be a battered old 35 mm print. And you'll think 'Why did we show this?' Because the [organization name] released it on Blu-ray, which means there's a master somewhere. That sort of thing happens a lot."*

Other challenges related to documentation clarity and access teams often face include a **lack of designated location** for specific information in existing documentation systems, documentation that is **not regularly updated**, workflows and processes that are **not documented**, and documentation that exists but is **not used**.[9]

STEP 5: Plan action

→ Now that you have gained an insight into your knowledge sharing example, it is time to think of a plan of action. How can knowledge sharing in your example be improved?
→ Discuss the concrete steps that are needed to improve knowledge sharing. Identify who needs to be involved and assign responsibilities.

Suggested Methods

→ Meeting regularly to share knowledge —— *pages 145–146*
→ Introducing internal presentations —— *pages 147–149*
→ Creating collective documentation —— *pages 150–152*
→ Organizing collective screenings —— *pages 153–154*
→ Organizing technical workshops —— *pages 167–168*

→ **9** For elaborations on the challenges related to the clarity and access to documentation see the subsections *"It is difficult to share and communicate knowledge about individualized systems."* on pages 35–36, *"When organizational knowledge is perceived as common knowledge, it is typically not documented."* on pages 36–37, *"Existing documentation might not be accessible or used."* on pages 37–38, *"Knowledge about preservation activities is often not documented when it is perceived as common knowledge."* on page 50, *"Limited documentation possibilities can hinder the documentation of preservation activities."* on page 51, *"Documentation may exist, but it is not created with the intention of being shared and therefore remains inaccessible."* on pages 51–52, *"Systems for documenting collection knowledge change."* on page 65, and *"Written resources are not available to all."* on page 84.

Sample exercise

Step 1: Reflect on the scenario

In our organization, the team works in two different locations: the film collection is located on one side of the city, while the cinema, together with the film-related, programme, publishing, and education departments are on the other side. As a result of not sharing the same facility, some colleagues do not see each other regularly, which reduces communication between the people in these different locations. In addition to limited opportunities for informal communication, colleagues do not have many opportunities for formal knowledge sharing between departments, as there are few cross-departmental meetings. **Because of these limitations in formal and informal communication, employees are not always aware of what their colleagues in other departments are working on.**

Step 2: Think of improvements

→ Finding ways to make colleagues familiar with the work of their colleagues in other departments.
→ Introducing and encouraging formal knowledge sharing between departments.

Step 3: Analyse

→ **What types of knowledge and skills are at stake?**

▷ Organizational knowledge, such as knowledge about responsibilities or knowledge about which colleagues have recently joined the team.
▷ Knowledge about preservation activities, such as knowledge about new acquisitions and restoration projects.

→ **Who has this knowledge and these skills?**

▷ Colleagues from the film collection hold knowledge about preservation activities, but they might not be too familiar with the exact responsibilities and activities of all their colleagues in the film-related, programme, publishing and education departments.
▷ Colleagues from other departments are not regularly updated about ongoing restoration projects and new acquisitions taking place in the collection department.

→ **How do other colleagues gain from having this knowledge and these skills?**

▷ By engaging in discussions, they can learn from each other and improve their working practices. For example, colleagues from the marketing and film restoration teams worked together to develop a marketing strategy to promote newly restored films. The outcome of these discussions was a standard for delivering promotional materials for restorations.

Step 4: Look at the scenario from different angles

Access to knowledge of colleagues
While colleagues are generally open to sharing knowledge with colleagues in other departments, communication remains scarce. The lack of regular interaction limits their opportunities to meet, get to know new colleagues and interns, learn about the work of colleagues in other departments, and develop relationships that could contribute to a more collaborative sharing atmosphere.

One of the archivists sporadically shares their knowledge of preservation activities with the other departments, even though this knowledge could be valuable to the work of those departments. Because there are no formal meetings where this knowledge could be systematically shared, these colleagues face challenges in obtaining knowledge from their colleague.

KNOWLEDGE SHARING BETWEEN DEPARTMENTS

The organization of work among colleagues in different departments does not involve much interaction or commuting between different locations. As a result, colleagues are often unaware of the specific tasks and projects that their colleagues in other departments are working on. Communication is mainly by email and telephone. There are no regular meetings between all teams, which limits the continuous exchange of knowledge about ongoing preservation activities.

In addition, colleagues have limited opportunities to meet outside of working hours. This lack of interaction is a result of both organizational factors, as there are not many organizational events where colleagues could meet, and a lack of personal initiative on the part of the employees themselves. For example, the regular film screenings set up by the organization could be a chance for colleagues to meet, but not all employees attend these screenings.

DOCUMENTATION SYSTEMS

We are often unaware of existing documentation created or archived by colleagues in other departments, even though this documentation could be useful for our work. For example, the film collection workflow is documented and stored on a shared server, but colleagues in other departments do not know it exists and therefore do not use it. Using this documentation would help colleagues get a better idea of the goings-on in the film collection.

STEP 5: Plan action

To improve knowledge sharing during daily work, management can:

→   Hold regular meetings

1.   Organize regular meetings where representatives from each department are invited to give updates on what their colleagues are working on.

2.   Make existing workflow and project documentation a topic of discussion at these meetings.
3.   Assign a colleague to take meeting minutes and share these with the entire team.

→   Organize collective screenings

1.   Encourage colleagues from different departments to suggest titles from the collection they would like to share with their colleagues.
2.   Find a time in the schedule when the theatre is available.
3.   Invite everyone from the team to the screening.
4.   Ask a colleague who suggested the title to prepare an introduction with some contextual information.
5.   Set up an informal gathering after the screening.

To improve knowledge sharing, colleagues can:

→   Attend regular status update meetings

1.   Prepare for the meeting by gathering information within the department that needs to be shared with other colleagues.
2.   Attend the meetings and take notes.
3.   Upon returning from the meeting, share updates with colleagues in their own department.
4.   Encourage colleagues to read the meeting minutes.

→   Attend collective screenings

1.   Participate in suggesting titles they would like to share with their colleagues.
2.   Prepare and deliver an introduction with some contextual information.
3.   Attend the informal meeting after the screening.

Preventing Knowledge Gaps When Ending Employment

Every employee working with audiovisual collections potentially holds unique and valuable knowledge that they acquired over time. Their departure from the organization, whether due to retirement, internal reorganization, voluntary departure, or a pursuit of career opportunities elsewhere, can result in a loss of knowledge: *"You're losing too much when you let people like [colleague's name] go without sharing information. That hinders your organization in moving forward, which people may not be able to see until something comes up years later. And then you've got a problem. 'What was the story behind this?' And say, 'I don't know, there's some stuff in the file. We don't really know.'"* Using systematic methods to share knowledge before an employee leaves the organization can help prevent the loss of valuable knowledge. Tacit and intrinsic knowledge built up over years of experience are particularly at risk in these situations. Types of tacit knowledge can include collection knowledge as well as knowledge related to specific areas of work and developed expertise. Also at risk is their understanding of how to manoeuvre and use different documentation systems, practical skills and technical knowledge, and knowledge of the organization's history and activities (the network of people, knowledge related to acquisitions, copyright information, past restoration, research, and preservation projects).

STEP 1: Reflect on the scenario

→ How is knowledge shared in your organization when someone is about to leave? Individually brainstorm about what comes to mind when you think about this scenario.

→ Share, compare, and discuss each other's views, then choose and describe one thing that typically does not go well.

STEP 2: Think of improvements

→ In the example you have chosen, what can be improved about the process of knowledge sharing?

Findings from research: The amount of knowledge, skills, experience, and responsibilities

The amount of knowledge, skills, experience, and responsibilities someone has will influence the knowledge sharing process that needs to take place in preparation for their departure. For example, if a person has worked across different departments, with a variety of projects, and held a **variety of responsibilities**, there could be many areas of knowledge and skills that must be transferred to the rest of the team. If a departing colleague's **responsibilities have been in one area of work**, the skills and areas of knowledge that need to be transferred to the successor are fewer and easier to identify. In smaller organizations employees are more likely to have multiple responsibilities, while in larger organizations employees may have responsibilities restricted to one area of work.

The amount of responsibility also **depends on the position**; for example, managerial positions usually have multiple responsibilities in different areas of work, requiring a complex set of knowledge and skills. For someone who has accumulated **a large amount of knowledge** over the course of their career, and for whom knowledge and practice have become intertwined, it can be challenging (both for themselves and their colleagues) to identify and understand how to share their mostly tacit knowledge, as illustrated in the following example: *"He [former director] had so much knowledge, but he had no skills for passing it on, and above all, he was not able to separate his knowledge and the manner in which he deployed this knowledge. So a handover of his knowledge was practically impossible."*

STEP 3: Analyse

→ What types of knowledge and skills are at stake in your example?

→ Think about this knowledge and these skills in detail. What responsibilities does the departing colleague have? What kind of information is involved in their knowledge and skills?[10]

STEP 4: Look at the scenario from different angles

→ The following pages explain some of the aspects (characteristics, issues and circumstances) of knowledge sharing that go hand in hand with ending employment, as established by research. You can use them as a lens through which to view your own knowledge sharing example. Do you recognize any of these aspects? How do they apply to your example?

→ Can you think of any other aspects?

Findings from research:
The nature and type of knowledge

The ways in which knowledge can be passed on from a departing colleague to their successor depends on **whether and how it can be articulated and documented**. For example, a colleague who worked in print inspection for much of their career may have developed working processes that can be explained verbally or even **written down**. In contrast, the practical skills that the same colleague employed to perform their work developed through hands-on experience and have become a form of embodied knowledge that requires different approaches to sharing such as **demonstration and joint practice sessions**.

The **ability to articulate and document knowledge depends on the type of knowledge** involved. As shown in the previous example, some technical knowledge and skills (handling audiovisual materials, equipment operation and repair) are difficult to document because they are **embedded in daily practice** and have become embodied. Other types of knowledge, such as knowledge of the background of preservation activities (e.g., conversations

→ **10** The four categories of knowledge described in the chapter focusing on areas of knowledge can be used as a reference. See pages 30–31 for organizational knowledge, pages 45–46 for knowledge about preservation activities, page 60 for collection knowledge and pages 72–73 for technical knowledge and skills.

and relationships with donors, the considerations that lead to certain decisions) and collection knowledge (e.g., knowledge gained from viewing audiovisual materials) are also difficult to identify, articulate, and pass on. One of the interviewees expressed the difficulty of trying to document their knowledge and skills used on a daily basis: *"I'm already experiencing that myself, that if I try to explain what I do and how I do it, I can do it up to a certain level because I just do it on a daily basis, and it's just a habit for me. To be precise and to describe it perfectly, it's sometimes just difficult."*

Whether knowledge is articulated or documented also depends on **the ability of each individual to recognize, articulate, and communicate their knowledge**, particularly when this knowledge is tacit. Some people are less adept at explaining, but can share knowledge by showing. Others may be used to communicating their work processes verbally, but not used to documenting them.[11]

Some information can be articulated and written down, but their documentation is challenged because there is **no designated location, system, or structure** within the existing forms of documentation.[12] In addition, some collection information may not have been documented due to its explicit content or unclear (legal) circumstances of acquisition.[13]

There are **advantages and limitations to each method of sharing**. For example, to sharing information through a catalogue: *"There's a language barrier, you can't put information in a database the same way you would talk to someone about it. At the same time, it's much more precise to write something down and it's also more democratic to put it in a database where everyone inside of the [organization name] can find it."*

→ **11** For more details on challenges related to articulating and sharing tacit knowledge, see the subsections *"It is difficult to share and communicate knowledge about individualized systems."* on pages 35–36, *"It is difficult to share and pass on connections and relationships."* on pages 55–56, *"Collection knowledge is tacit knowledge."* on pages 65–66, *"Tacit knowledge acquired through exposure is difficult to transfer."* on pages 82–83, and *"Embodied knowledge is difficult to transfer."* on pages 83–84.

→ **12** See the subsections *"When organizational knowledge is perceived as common knowledge, it is typically not documented."* on pages 36–37, *"Knowledge about preservation activities is often not documented when it is perceived as common knowledge."* on page 50, *"Limited documentation possibilities can hinder the documentation of preservation activities."* on page 51, *"Documentation may exist, but it is not created with the intention of being shared and therefore remains inaccessible."* on pages 51–52, *"Practices of documenting preservation activities change over time."* on page 52 and *"Knowledge developed about collections is not always shared with others."* on page 67.

→ **13** See *"Sensitive information is difficult to document and pass on."* on pages 54–55.

Findings from research:
Circumstances of departure

The circumstances of someone's departure can affect the likelihood of sharing and retrieving knowledge before they leave. If a colleague leaves abruptly, there may be little or no time for knowledge transfer.[14] On the other hand, if a colleague is about to retire and the retirement date is known in advance, there is time to prepare a knowledge transfer before the departure. However, organizations need to **be proactive in using the time available** when they are aware of an impending departure, especially when multiple colleagues with a lot of valuable knowledge are approaching retirement at the same time. Not having a **succession plan** in place could result in knowledge gaps.

Abrupt personnel changes can occur without notice, resulting in **an immediate loss of knowledge** if the organization is not prepared. People may leave abruptly as a result of a **sudden reduction in staff due to reorganization, career changes, unsatisfactory working conditions, a dismissal from the organization, personal circumstances, or health problems**. Reorganizations or cuts in funding may even cause several people to leave or change jobs at once. The following example describes the problem of knowledge loss when several colleagues leave as a result of reorganization: *"After many months of talking with the government [about the possibilities of retaining colleagues despite the reduction of positions], they said, 'Okay, so you're going to another office, from this state, in [city name]. And that was not next month, it was: 'Tomorrow you need to be there.' So that was a very tragic thing, both for the [organization name] and the people who worked there. Because it's not a matter of five years, some of the people had been working there for 35, 40 years. They had so much knowledge on the institution itself. It was done in such a brutal manner that they didn't have the time to say goodbye. And the oral history that went with them, forget it, you know. It was not done at all, which is so tragic."* An additional difficulty arises when **people leave on bad terms with the organization or are unhappy with it**, and it becomes **difficult to reach out to them** after they leave, thus making their knowledge inaccessible.

→ **14** For a discussion of the challenges associated with waiting to document organizational knowledge until there is an immediate need, see *"Efforts to share organizational knowledge are often made at the last moment when a sense of urgency arises."* on pages 39–40.

Findings from research:
Continuity of personnel with shared experience

The risk of losing knowledge when someone leaves the organization depends on **whether the tacit forms of knowledge still survive with the remaining colleagues in the team, or are unique to the person leaving**. Colleagues who have worked together for a long time accumulate **shared knowledge through their shared experiences**, which may remain tacit. Using this knowledge thus depends on the availability of the colleagues who possess it. It becomes challenging to access this shared tacit knowledge in the case of **downsizing**: *"A lot of information is just sitting in people's heads: 'Oh, here's how you do this,' or 'This client, you have to approach it this way.' Those kinds of things are invaluable. And that's lost when you have a big reduction in your staff from having a real team with a variety of experience."* When an individual leaves the organization, there may be **other colleagues with similar levels of experience, a similar level of tacit knowledge and skills, to fill the knowledge gaps**, as illustrated in this example: *"You obviously have to rely on the colleagues from that era who are still with you. Not that it's just one defined era, but it's worth it to have a multi-generational composition of your institution. So there's always someone who can at least partially represent the memory of your predecessors."*

The continuity of personnel with shared experience and knowledge depends on **job security** and whether an organization employs people on **permanent or temporary contracts**. High turnover may also be the result of changing work trends. In the past, people tended to stay with one organization for longer periods of time, accumulating and developing their collection-related knowledge. Over time, **work trends have shifted to shorter tenures with an organization**. Some organizations want to retain people for longer periods of time, but have trouble finding new team members who want to stay, as this example shows: *"Before people used to be at least somewhat interested, but now I feel like there's very little interest. Or at least there used to be this shared table of interns that the HR archivist looked after. But no one from that set of people signed up. I don't know how to get people excited about this kind of work, to decide that they're going to do it permanently and collaborate with us."*

Staff turnover can lead to **disruptions in how individuals develop their knowledge on the job**. If colleagues are working in an archive on a temporary basis, they may be less motivated to develop knowledge compared to their long-term colleagues. In addition, some people may not feel motivated to constantly train new staff members, especially if there are not enough resources to retain them for longer periods of time.

Multiple turnovers in a single position over a short period of time can **disrupt the continuity of certain practices** and lead to colleagues not understanding the hows and whys of workflows, especially when documentation is lacking. For example, the only temporary digital restoration position in an organization has had multiple turnovers over the past few years. Consequently, the staff member who took over the position has found it difficult to understand the institutional approach to digitization and restoration and to judge whether their practice is consistent with the practices of their predecessors.

Step 5: Plan action

→   Now that you have gained an insight into your knowledge sharing example, it is time to think of a plan of action. How can knowledge sharing in your example be improved?
→   Discuss the concrete steps that are needed to improve knowledge sharing. Identify who needs to be involved and assign responsibilities.

Suggested Methods

→   Creating collective documentation —— *pages 150–152*
→   Planning a period of overlap —— *pages 155–157*
→   Capturing knowledge through oral history —— *pages 158–162*
→   Organizing technical workshops —— *pages 167–168*

Sample exercise

Step 1: Reflect on the scenario

For a period of five years, one of our colleagues has been the sole individual responsible for digital restoration in our organization. This colleague is leaving their position and may not have the opportunity to share their knowledge one-on-one with their successor because **the system does not allow more than one person to hold a position at a time**, meaning there is no overlap. This can lead to challenges in **sharing tacit knowledge and skills that are difficult to articulate and document**. Another issue is that other **colleagues may not be familiar with the departing colleague's work practices**, making their knowledge unique and therefore even more vulnerable. In addition, it may be **difficult for successors to find documentation** left behind by a departing colleague if it hasn't been assigned a designated location in the existing documentation system because they might not be aware of it.

Step 2: Think of improvements

→   Finding ways to document the knowledge of a departing colleague.
→   Ensuring that documentation remains available to successors.

Step 3: Analyse

→   **What knowledge and skills are at stake?**

▷   Knowledge related to preservation activities and technical knowledge and skills pertaining to film handling and digital restoration.

→   **What responsibilities does the departing colleague have? What kind of information is involved in their knowledge and skills?**

▷   Knowledge of institutional restoration principles that guide decision-making.

▷ Knowledge of past restoration projects and the evolution of restoration practice (how things were done in the past and why).
▷ Knowledge of the restoration workflow.
▷ Knowledge of the practice of documenting restoration projects.
▷ Skills related to equipment use and familiarity with machine peculiarities.

Step 4: Look at the scenario from different angles

The nature and type of knowledge
While much of the departing colleague's knowledge is tacit and difficult to articulate and document, certain areas of their knowledge have been documented. For instance, past restoration projects have been documented in restoration reports. These are not shared internally.

The restoration workflow and principles have not yet been put down in writing, but could be. The challenge is that a document describing the restoration workflow and principles would have no assigned location in the existing institutional documentation. It could be stored in a shared folder, but successors may not be able to access it unless they are told about the document.

Skills related to the use of equipment cannot be conveyed through one-on-one training, but some of them can be documented through video, especially the demonstration of handling machine peculiarities, which are difficult to document in written form.

Circumstances of departure
The departure has been announced in advance, giving the organization time to plan for the transition and take the necessary steps to document the departing colleague's knowledge.

Continuity of personnel with shared experience
There is only one restoration position in the team and other colleagues are not familiar with the restoration workflow, making the knowledge of the departing colleague unique.

Other factors
The management does not realize how unique the knowledge of the departing colleague is.

Step 5: Plan action

To improve knowledge sharing when a colleague is leaving the organization, management can:

1. Arrange a meeting with the departing colleague to discuss the handover process as soon as possible after the departure is announced.
2. Create a handover plan with the departing colleague, give instructions for creating video documentation, and provide guidelines for documenting the restoration workflow in writing.
3. Work together to find a place where the relevant documents will be accessible to successors.
4. Monitor and review the documentation.

To improve knowledge sharing, a departing colleague can:

1. Attend a meeting with the management to discuss the handover process.
2. Create a handover plan.
3. Estimate how much time it will take to create video and written documentation of work processes, and what tools they will need.
4. Present their ideas to the management.
5. Start documenting knowledge according to the plan.
6. Let others know how different types of knowledge have been documented and where the documentation can be found.

Retrieving Knowledge When It Is No Longer in the Organization

When audiovisual archivists leave an organization, they often take invaluable knowledge and expertise acquired over time with them. If this knowledge is not properly documented or shared with other team members, archives that have grown dependent on the knowledge and skills only these employees possessed will face a great challenge. In these circumstances, organizations can try to bridge these knowledge gaps by actively seeking input and guidance from former colleagues who hold the desired knowledge and skills.

Knowledge gaps created after colleagues have left the organization can be the result of their specific areas of expertise and the fact that tacit knowledge can be difficult to share. The losses may include knowledge about the collections, the history of the organization, and past practices and approaches. Former colleagues themselves may feel the need to stay involved in the organization after they leave, recognizing the value of their knowledge to a new generation. The following example illustrates the types of knowledge that one respondent identified as potentially useful to future generations: *"I would like to be involved in staff training. I would particularly want to get across to new staff a sense of the archive's history, why it exists, the history of the collection, and to excite some interest in our field history pre-1980. And I'd like to see some sort of regime built into staff training that encourages staff to educate themselves, to look back and look at certain things and pick up some knowledge."*

STEP 1: Reflect on the scenario

→   How is knowledge shared within your organization when it comes to retrieving knowledge from a former colleague? Individually brainstorm about what comes to mind when you think about this scenario.

→   Share, compare, and discuss each other's views, then choose and describe one thing that typically does not go well.

STEP 2: Think of improvements

→   In the example you have chosen, what can be improved about the process of knowledge sharing?

Findings from research: Knowledge gaps

Former colleagues with a long tenure in an organization and a great deal of experience, with specialized and complex knowledge gained through their variety of experience, "fountains of knowledge," as one interviewee put it, remain valuable after they leave the organization. Valuable knowledge can also be found among colleagues with shorter tenures in the field, especially if they have been solely responsible for certain tasks and therefore developed unique knowledge. Reasons for maintaining connection with colleagues who left may include a **lack of comparable knowledge in the team as well as a lack of documentation**. It is also possible that **the personal documentation they left behind does not provide sufficient clarity and requires verbal explanation to make it fully understandable to others**. Once knowledge gaps have been identified, the process of knowledge sharing will depend on whether colleagues in the organization are prepared to take the initiative and make the effort to find out which of their former colleagues might hold that knowledge.

STEP 3: Analyse

→   What types of knowledge and skills are at stake in your example?

→   Who has this knowledge and these skills?

→ The following pages explain some of the aspects (characteristics, issues and circumstances) of knowledge sharing that appear when knowledge is no longer found in the organization, as established by research. You can use them as a lens through which to view your own knowledge sharing example. Do you recognize any of these aspects? How do they apply to your example?

→ Can you think of any other aspects?

Findings from research:
Relationship between the organization and former colleagues

The ability to retrieve knowledge from former colleagues and their ability to share their knowledge with remaining colleagues depends on the **nature of the relationship between the organization and the former colleagues**. It is contingent on **whether the organization maintains contact with former colleagues, and how proactive the organization is in reaching out to them**. For example, one organization actively tries to maintain an alumni group that keeps in touch with current employees.[15] However, in another example, an organization did not take advantage of an opportunity to retain a former colleague, despite their **initiative and willingness to share their knowledge and experience with current employees**.

Keeping in touch with former colleagues is one thing, but organizations also need to **actively reach out to them**, as the following example shows with regard to retrieving tacit collection knowledge: *"It should be known among staff members that if they're working with something in the collection that goes back to the period when I was active here, and they have questions, that they can just find me and say, 'What about this, what can you tell me about this film? I'm puzzled about something.' I'd probably remember it. I physically handled a lot of those films. I can remember details of them that you would never write down. But I could pass this on to somebody. But the staff members have to feel at ease to do just that. Just to pick up the phone or email. Now, just occasionally, that has happened."* By taking the initiative to tap into their knowledge, the organization shows

→ **15** See *"Creating and using an alumni network."* on pages 165–166.

their former colleagues that they are still valued for their knowledge even after they have left.

Findings from research:
Sharing attitude and ability of former colleagues

There are many different ways in which people feel comfortable sharing their knowledge. This largely depends on their **ability to use certain methods, which is influenced by their area of expertise and their communication style in general**. For example, individuals who have primarily developed writing skills may find it easier to convey information in written form, while those who have more practical experience with archival workflows may feel more comfortable demonstrating their skills or sharing their knowledge verbally, as illustrated in the following example: *"Now he is retired, but he is still working on it. He will document a little part of what he knows, and not everything. He should write a book, to share his memories and everything. But not everyone is made to write books, he has difficulties writing these kinds of documents because he comes from another generation that is more experience-based. He was a projectionist, and then became the head of the film department. And yes, he has a lot of difficulties to make this [knowledge] theoretical."*

The ability of former colleagues to share their knowledge is also related to their familiarity with current documentation systems and standards. Audiovisual archivists typically become accustomed to the documentation systems and standards of their time, but these standards and practices are constantly changing, and some people may find it difficult to adapt to using new forms of documentation. **Former colleagues may find it challenging to participate in knowledge sharing practices that require the use of new documentation tools which they are less familiar with.** For example, one interviewee who worked with a retired colleague to identify and describe film elements noted that this former colleague was accustomed to using index cards to document and access technical and content information about collection elements. The former does not find the database intuitive to use and needs the younger colleague's help to navigate the database.

Findings from research:
Relationship between former colleagues and their successors

Retrieving knowledge from former colleagues depends on their formal relationship with the organization, but even more on the **relationship with individual remaining colleagues**. For example, in one organization, a now-retired colleague and their successor developed a close personal relationship during the period of transition and handover. The two meet regularly, and the former colleague openly shares their knowledge and is willing to answer the successor's questions. In this example, knowledge sharing is based on a good personal relationship, because when the same former colleague is approached by other colleagues on the team, they are more reluctant to share knowledge.

A positive relationship between former and current colleagues can evolve organically, but it can also be consciously developed. Building such a relationship often requires time and effort, which are necessary to help foster mutual understanding and connection. **The handover process can strengthen a personal connection between the departing colleague and the current team.**[16] A relationship can be consolidated through regular communication outside of the professional context, as the following example illustrates: *"From my point of view, we have a very nice relationship. She's very nice. Whenever I have a question for her, even now, she's very open to communicating with me. And we meet twice a year, partly socially, partly to discuss concrete things. I'm very pleased with how this transition happened. I very much respect her and I'm very happy that we are still in touch."*

The relationship between a former colleague and their successor can be influenced by the **experiences the former colleague had while they were employed by the organization**. Not all may have left on good terms, and some may **retain negative memories of their time there or the negative circumstances surrounding their departure**, which can complicate efforts to reach out to them. These negative feelings may stem from difficult situations, such as a reorganization or poor working conditions. The following example illustrates the experience of one interviewee attempting to overcome this challenge: *"I've been keeping an alumni list of people who are disgruntled, who went away unhappy, and some of them told me: 'I don't*

want to have anything to do with the place ever again. You know, it was so bad to me.' It seems like such a waste of their knowledge. If I can encourage them, and I'm doing this one on one at the moment, to come back into the fold and see themselves as having played a role in this institution in the past, then perhaps we might be able to convince them that we can try and reincorporate them into the fold."

Generational dynamics can come into play in relationships with former colleagues. A positive relationship between colleagues of different generations is related to the ability of colleagues to take an **intergenerational perspective on changing preservation activities**. On the one hand, less experienced generations may benefit from understanding why certain practices were common in the past, as illustrated in this example: *"One of the things I've learned from the interviews is how all the changes in the organization, historically, affect how people behave and do things. And I sit in interviews, and I'm like, 'Oh, that's why this team won't do this or that.' Because you don't understand why people do things in a certain way, it just seems very odd. And then you realize it's because historically they couldn't, or they were told not to do certain things, or, you know, I think there's lots of organizational things, which kind of come out [during interviews], which I think are very useful."* On the other hand, former colleagues might benefit from recognizing that **new generations are continuing to adapt their working practices**, as this example shows: *"There wasn't the slightest anger in me towards this because it was my life's work. I had inherited it in some form, some things I liked, some I didn't, some I adjusted, some I changed. Of course, I incorporated the new technologies into it, so I thought that someone should continue developing it and I saw no reason to be offended."*

Trust plays an important role in sharing knowledge with former colleagues. In some cases, colleagues who have been in a position for a long time have developed a **rather protective attitude towards the collections they have worked with and the knowledge they have acquired over time**. After retirement, they may be willing to remain available to transfer knowledge and skills only to successors with whom they **share a similar perspective on working with the collection**. One interviewee shared their experience of gaining knowledge from former colleagues who shared similar perspectives on working with the collection. These former colleagues, fond of their successors, actively supported them as honorary members in discussions with the management: *"They were very helpful and I think*

they were very happy with the way the handover went. They thought that it was much improved and that they found the right people, younger people, who are interested in it, who understand it, who will continue it and so on. So, they helped a lot in all the crisis situations, both providing their technical, organizational and collection knowledge, and with the administration when needed."

In addition, some former colleagues may feel comfortable sharing their knowledge if they believe a **successor will remain committed to the collection** for an extended period of time. One interviewee described how a former colleague seemed skeptical about sharing knowledge before and how this appeared to have changed now that the team is more stable: *"People would only work at the archive for a short time. And everyone tried to change things again and again. I have the feeling in the beginning she [former long-term archivist] was very skeptical about another change. Someone who is going to leave after a year. But she has more confidence now."*

STEP 5: Plan action

→ Now that you have gained an insight into your knowledge sharing example, it is time to think of a plan of action. How can knowledge sharing in your example be improved?
→ Discuss the concrete steps that are needed to improve knowledge sharing. Identify who needs to be involved and assign responsibilities.

Suggested Methods

→ Capturing knowledge through oral history —— *pages 158–162*
→ Involving honorary employees —— *pages 163–164*
→ Creating and using an alumni network —— *pages 165–166*
→ Organizing technical workshops —— *pages 167–168*

Sample exercise

STEP 1: Reflect on the scenario

For almost a decade, junior colleagues have been in charge of caring for a small collection of amateur films. During that time, there have been two turnovers in this position, meaning that **the knowledge about this collection has been passed from one colleague who was on a short-term contract to another**. Because of the frequent turnovers there has been no chance for the team to develop an in-depth knowledge about this collection. In addition, **knowledge about this collection has not been well documented**, so remaining colleagues and successors often find themselves in a situation where they can't find answers to their questions. The organization has made no effort to ensure that this knowledge stays with long-time colleagues and evolves over time. Due to this lack of effort and the resulting documentation gaps, **the knowledge about this collection can only be found among former colleagues**.

STEP 2: Think of improvements

→ Ensure that knowledge about this small collection of amateur films stays with colleagues on permanent contract.
→ Create a practice of documenting this knowledge.

STEP 3: Analyse

→ **What types of knowledge and skills are at stake?**

▷ Knowledge about the condition of film elements (technical knowledge).
▷ Knowledge about the content of the films as well as copyright information (collection knowledge).

▷ Knowledge about relationships with donors, which films have been digitized and for what purpose, and the specification standards that were followed (knowledge about preservation activities).

→ **Who has this knowledge and these skills?**

▷ Knowledge is held by two former colleagues who used to work with this collection.

STEP 4: Look at the scenario from different angles

RELATIONSHIP BETWEEN THE ORGANIZATION AND FORMER COLLEAGUES
The organization does not systematically keep in touch with former colleagues in general, but it is not difficult for them to find contact details of former colleagues when they need them.

SHARING ATTITUDE AND ABILITY OF FORMER COLLEAGUES
Both former colleagues are generally used to sharing knowledge in written form, but they are also good in explaining.

RELATIONSHIP BETWEEN FORMER COLLEAGUES AND THEIR SUCCESSORS
Both former colleagues left on good terms. One current employee is particularly friendly and good at keeping in touch, and has developed good relationships with both of them individually. When she cannot find information in the documentation, she often calls one of the former colleagues.

OTHER FACTORS
Knowledge was often not documented due to a lack of documentation practice and standards for documenting amateur films in the organization. Since the early days of the collection, the documentation practice was based on documenting technical and content information in a separate spreadsheet, and no one has integrated this data into the database

because many fields within this spreadsheet would not fit the fields in the database. Therefore, information about this collection is contained and shared in a circulating document and is not available to all those who might need it.

STEP 5: Plan action

To improve knowledge sharing when retrieving knowledge from a former colleague, management can:

1. Ask a colleague in charge of the collection in question to review the existing documentation, write down all the questions that come up in the course of their daily work, and then determine what knowledge about films in the amateur film collection is missing or unclear.
2. Invite both former colleagues to the archive for a one-day workshop to answer the successor's questions.
3. Provide a documentation form that can be used to document both existing and new knowledge. Make a plan for integrating this information into the database to make it accessible to everyone on the team.
4. Reorganize responsibilities within the team. Assign the responsibility for maintaining this collection to senior archivists.

To improve knowledge sharing, a successor can:

1. Review existing documentation about the amateur film collection.
2. Write down questions about the collection that come up in the course of their daily work.
3. Meet with former colleagues and discuss questions with them. Document findings, take notes, record audio/video.
4. Follow the instructions of the management for creating and migrating documentation into the database.

Point of Departure III
→ **Methods**

Throughout the interviews, colleagues have described methods of knowledge sharing that they use or would like to use. In this chapter, we have selected and described some of these ideas and summarized their main components, which we hope will provide inspiration. This list of methods is by no means exhaustive. First, the extent to which these methods are described here depends on the amount of data we have collected describing that particular method. Second, if a method was mentioned but not described in detail, we decided to leave it out completely. This leaves room for further research, as there are many more methods that are worth exploring in more detail, but extensive further research on individual methods is beyond the scope of this project.

Planning an Induction Process

The period during which new employees are introduced to their roles and the organization is a critical moment for knowledge sharing.[17] Although the induction process depends on who is being introduced to the organization, what the newcomer's role will be, and the situation in which they are being introduced, **such processes have certain components in common** and an organization can benefit from structuring and planning this process. Throughout the interviews, several colleagues reflected on the induction process either from the perspective of a teacher or a learner, or both. Their reflections clearly demonstrate that the induction process varies according to **the people involved, the knowledge to be acquired, how the knowledge in question can be transferred, and the order in which things can be learned. In some organizations, certain parts of the induction process may be similar for each new employee.**

"Induction into their role on site was incremental, day to day, really. There was a checklist of things to make sure they knew where to find them. Their photocopier pin, where to find it, and knowledge of health and safety considerations. There were all sorts of online modules they could fill in for desk safety and, you know, how to sit at your desk properly and adjust your chair and that kind of thing. They did all those standard requirement health and safety inductions."

The management, the colleagues introducing a new employee, and the new employee themselves play a role in the induction process. Because the introduction of a new employee requires the allocation of time and resources, **management awareness and support** are essential. They can make sure that enough time and resources are allocated for knowledge transfer.

Typically, one or more colleagues are involved in guiding the newcomer through the induction process. They are referred to as **mentors, coaches, or supervisors**. Ideally, these colleagues introduce the newcomer to their **role and responsibilities**, share **practical organizational knowledge** (e.g., time management, fire emergency evacuation plan, employee rights), and provide a **general understanding of the organization**, including its goals and values or how different departments work together.

"I would say that you need a lot of patience, you need a lot of time and you need someone who's going to hold your hand, you need a mentor. And that is extremely important because you can't learn by yourself."

The learning process is a back and forth between the newcomer and the colleagues training them. In this process, **asking questions and having colleagues to turn to with questions** is key. If there is no formal induction or training period, it is up to the colleagues doing the training and the new employees to carry out this process alongside their regular work. In these situations, it is especially important that newcomers should feel comfortable asking questions, as this may be the only way they can reach their colleagues and learn from them.

"I would ask people. People are always quite happy to talk about their work and explain it, I think. And that's how I picked up a lot of what I had to know, it was just by talking to colleagues and asking, 'What do you do and why, and what does this mean?' and trying to get a bit of a sense of what's going on from that. There was no training as such. I felt it was up to me to ask questions."

The **different learning curves pertaining** to the knowledge and skills that need be learned have to be considered. Some knowledge can be acquired in the early stages of the induction process, but some knowledge and skills take time to learn and develop. Therefore, it is important to focus on **learning how to navigate knowledge first**, which will make it easier to develop in-depth knowledge later. For example, it may take time for a newcomer to gain an understanding of team dynamics and the roles and responsibilities of each team member and department, but a first step in gaining this knowledge is to **introduce them to their colleagues at the very beginning**. This will also give the newcomer the knowledge of where to go with questions later on.

"On my first day of work, I was taken to meet people. And we met not every-one, but some key people that might be useful to know. My colleague took me around and introduced me to a few people. But just to say, 'This is so and so, this is what we do.'"

Another similar example entails **referring people to written materials for further learning and future reference**. A supervisor can direct new-comers to relevant literature and documentation and instruct them where to find written resources (books and the Internet), review standards, pol-icies, and procedures of the organization as well as teaching them how to search for information in the documentation, databases, catalogues, and index cards.

When it comes to gaining an understanding of manual or technical pro-cedures related to collection materials, there are also different stages of learning. For example, without prior experience, it takes some time to get a feel for how careful one needs to be when using and handling audiovis-ual or film-related materials and equipment. For this reason, it is useful to have **clear instructions and guidelines** in place that provide a good foundation from the outset.

"I would say the induction really provided the foundations for the work because it primarily concerned handling the photographs. Because, at that stage, they weren't digitized. Any research meant handling the photographs, which obviously isn't a great idea when you consider how very fragile they are. They're very likely to get damaged when they're handled by hand. So I was given very strict instructions on how to handle them."

In the induction process, the order in which things are introduced also plays a role. One interviewee pointed out the importance of **starting with a gen-eral introduction**. This could begin with the structure of the organization, then moving on to the responsibilities of team members, the role of the department in question within the organization, and only **then introducing the collection**. This gives the newcomer an understanding of the bigger picture, the value of the collection, and the work activities. With someone to explain the most notable acquisitions first, it is easier for them to get an idea of what the collection entails before getting into the details of the work in the second step.

Some types of knowledge can be supported by the **use of documentation**. For example, in order to explain the work process and workflow that a new employee will be involved in, documentation can be helpful. The same is true for practical and administrative information, which can be documen-ted and serve as a reference for all new employees.

A training process often uses combined methods. For example, some tasks require a combination of **instruction and self-learning** and practice. While the supervisor can provide an introduction and guidance in performing tasks, it is up to each trainee to practise and develop their own skills through experience.

"There was some form of mentoring and hands-on practice as well. And the more you did it, the better you'd get at it."

Throughout the induction process, there are other methods that can help smooth the process. For example, encouraging new colleagues to con-sciously reflect on mistakes and organizing **feedback can help improve both knowledge and skills**. Another helpful tool is **note-taking**. One col-league stressed the importance of encouraging newcomers to take notes and document their first steps and what they learn in those first steps.

"In their first two weeks, I will be sitting with them a lot to guide them through all the various processes, and encourage note-taking so that, hopefully, if I show them how to do something once, they'll write it down and follow the notes."

Notes can be used for future reference and may even be useful to others in **documenting previously undocumented knowledge**. For example, one colleague recalls keeping a diary with information about the collections from their early days of working in an organization. This diary is still used to find information that has been passed on verbally by colleagues.

Mentoring

The importance of mentoring as a means of **transferring knowledge from experienced colleagues to less experienced colleagues** was consistently mentioned throughout the interviews. Interviewees describe a mentor as someone who not only introduces and supervises a newcomer formally, but also provides **encouragement, support and guidance beyond the immediate responsibilities**.

"And then it did help to have those people to go to, to ask questions and learn from while you work there, that's invaluable. Which is why you need people there to work with you, because a big part of mentoring is just working with someone."

"If you want to do something, he's very good at giving you opportunities. I've mentioned that I would like to do writing; I'd like to do more research-based stuff. There are some film collections I would really like to work on. And I also really like advocacy, I really like promoting the field. So, I want to be able to go out and do presentations and promote the work that I do and promote the field and promote the [organization name]. So, I've been lucky that I've been encouraged in that area as well."

"So, being there, and being noticed, and having those people encourage you, people who've asked to work with you, helped. Those were sort of active examples of people who mentored by taking an interest, or by offering opportunities."

A mentor can play a variety of roles. They can provide assistance with **career and professional development**, stimulate learning in general and further education. They can also answer questions about **complicated issues that arise in the workplace, introduce newcomers to the broader field** such as professional networks and colleagues from other institutions, and share their perspectives on the work. A mentor can pass on more than just knowledge; they can also pass on intangibles such as passion, interest, and value.

"And he decided to really teach us a lot about his method because he wanted his philosophy as a restorer to survive in some students, I think."

"I introduced my colleagues and other archivists from other sister institutions to the international associations I have been engaged in. For instance, I signed up as an individual member in IASA and ended up convincing my director to permit my other colleagues to join."

Typically, a mentor is someone who provides **guidance on a long-term basis**. Mentors can be **part of the same institution or external**. The latter can include a retired colleague, former professor, or someone from another organization.

"I had two informal mentors. It wasn't a formal programme. The relationship started formally through setting up these projects, but then we built a relationship that continues even to this day. It is like a very classic mentor-mentee relationship where I could go to them with questions even after I moved on to my first job. And, you know, a safe space to ask what maybe would feel like a stupid question or something, which was very, very important. There's just a lot you don't learn in school, in a master's programme. And once you actually start working on your own projects, to just have someone to turn to for advice about things was really important."

Mentoring is frequently **informal in nature**, characterized by an unspoken connection between the mentor and mentee. Individuals can naturally embrace the role of mentor without explicitly designating themselves as such, while mentees can seek guidance from individuals without explicitly seeing this as a mentor-mentee relationship. But mentoring can also be organized formally. A colleague who works for a large audiovisual institution gave the example of a **formal cross-mentoring programme** that was established to promote professional growth and **knowledge sharing among colleagues from different departments**. This programme was open to everyone in the organization.

"When I first arrived, I did a mentoring scheme. I basically signed up to be a mentee because I thought, well, while I'm here, I might as well learn as much as I can."

Participants could sign up to be **either a mentor or a mentee** and had to fill out a form with their personal information, job title, learning interests, and areas of expertise. A dedicated coordinator would then **pair individuals based on their preferences**. **Mentor-mentee meetings would take place periodically**, at intervals determined by the mentor and mentee. In the following example, the mentee would prepare a set of questions for their meetings.

"We just schedule in an hour and a half and usually get a coffee. And I'd have an agenda of questions. Usually, I kind of come prepared. And we just have a chat and talk about things."

As this example shows, a structured mentoring programme can be suited for large organizations where employees may not be familiar with each other and the work of other departments. Pairing a mentor and mentee from different areas of work **allows individuals to look beyond their immediate responsibilities, explore unfamiliar departments, and gain insight into other areas of work that can lead to a more complete understanding of the organization. By allowing them to see the bigger picture**, they can better understand how their work relates to the whole.

"We have lots of conversations about what curation is in an archival context and how we do curating and how the [organization name] approaches not just restorations but, you know, stuff that they then present at festivals and all sorts, so it was quite a mixed bag. But I think that had a big impact on my skills and experience and also my knowledge."

A mentorship programme like the one described here can foster **strong connections between colleagues** and can continue to be beneficial after the mentorship programme officially ends.

"I managed to develop a very good relationship with him. And even though the mentor programme is finished, he is still kind of informally my mentor, and I got a lot of opportunities through this that I don't think I would have got otherwise."

Meeting Regularly to Share Knowledge

"I tap into the knowledge of all the staff in the archive through discussions and conversations. We usually have weekly meetings to discuss the necessary actions to take in pending projects and requests and to talk about the general administration of the archive."

Meetings are one of the most common ways to share knowledge, and they can be used more intensively and advantageously if they are **consciously recognized** as knowledge-sharing opportunities. Meetings are typically organized to discuss a wide range of topics that require attention and concern the daily work in audiovisual archives. Sometimes these meetings occur only when an emergency calls for discussion. While such sporadic or random meetings may sometimes be necessary to address urgent matters, they lack the structure and consistency needed to create **a sense of routine** when it comes to knowledge sharing. One possible solution is to organize meetings that take place on a regular basis, as a **fixed part of each team member's schedule**. In many archives, colleagues meet once a week to **share brief updates on their recent work and discuss relevant issues**. As mentioned, taking turns in keeping **meeting minutes and sharing them with the entire team** can be a useful way to keep everyone involved and informed even if they could not attend the meeting.

Such meetings are a useful way to share organizational knowledge and knowledge of preservation activities with colleagues in the same department and across departments. By attending meetings on a regular basis, employees **gain insight into the ongoing activities of colleagues in other departments** and get a bigger picture of what is happening in their organization.

"One of the things we would like to do, with all these different tasks and different jobs is for everyone to get to work with the content [of the collections].

Working with the database and with certain subcollections and gaining knowledge about these collections. And at the same time also how to share this with others and not to keep it to yourself but have moments to present . . . I mean we do this with these meetings on Wednesday, a little bit. But it could still be improved a lot, how we really share the things we work on, in a way that other people are also listening and really getting an idea."

Additionally, these meetings serve as a **platform for collective brainstorming**, fostering discussion about project-related challenges and potential solutions. Meetings are also a way to meet with colleagues who may have limited opportunities for informal communication on a day-to-day basis since they work in different **departments and different locations**.

To keep meetings manageable and prevent them from taking up too much time on a weekly basis, they **should be organized effectively**. For example, in an organization with approximately twenty employees, only one representative from each department needs to attend the meeting to present the department's activities. In contrast, in larger organizations, weekly meetings are held in each department, giving everyone the opportunity to share their individual updates. Such meetings should **not be time-consuming** so that they can be **easily integrated into the daily routine**.

"Yeah, but I think that's time worth spending, to be honest. Our weekly meetings are not long, like twenty, thirty minutes max, something like that. Okay, if other people are with us, and it's an hour, I feel an hour a week should be enough. Or maybe we can all come together every other week."

Meetings offer a platform for **sharing informative knowledge and updates**. However, such meetings are not necessarily suitable for sharing more **comprehensive and specialized knowledge that demands dedicated efforts and a substantial amount of time**. In such cases, alternative approaches such as focused discussions, collaborative projects, or training sessions might be better suited.

Introducing Internal Presentations

There are several different possibilities how to integrate lectures or presentations in the workplace. These can be organized by and for colleagues in order to share expertise or provide insight into projects and workflows. One example is the "lunchtime seminar." In this scenario, colleagues gather **once a month during their lunch break** to listen to one of their colleagues share insights into a particular topic for an hour. Visiting colleagues from other institutions can also be invited to **present their topics of interest** during these lunchtime lectures.

"That post was created to manage the teams who maintain the equipment. But also to encourage far more knowledge transfer and sharing of enthusiasm, experience and specialist expertise among the people who work here. So, we created the lunchtime seminars between us, and these became excellent opportunities for people to talk about their topics of interest, or any topic that they thought would be of interest to other people working here, at the conservation centre. [. . .] Quite often we invite people [a guest] to come and talk from other perspectives as well as our own."

Another example describes regular classes of about three hours, organized by and for colleagues, where colleagues have the opportunity to **talk at length about their insights or projects**.

"We started to do these three-hour courses, internal courses, where someone would share knowledge or show a workflow this person was working on, as a way to have a broader conversation with other colleagues."

"Every week, someone or a group of people would talk about something. This could be something that they knew a lot about themselves. For instance, I had a colleague who studied the equipment collection, and then she gave this lecture on the equipment collection for the peers."

Such dedicated meetings can serve several purposes. First, they provide a means of **gaining a better understanding of activities in other departments**; for example, one colleague mentions the benefit of learning about the archival processes within the poster collection, which they were not familiar with before. Second, inviting colleagues from other institutions to participate provides **insight and a chance to compare one's own to the working practices of other archives**. And third, such meetings create **opportunities for discussion among colleagues and for exploring alternative perspectives and approaches** together. In one example, a presentation on how to select items for digitization sparked a discussion among colleagues of different generations holding different technological expertise. This exchange of perspectives can enrich the understanding of digitization practices.

"There was such an exciting discussion. We talked about whether it is better to digitize the duplicate positive than the negative. The older employees also really wanted to discuss this. Because they knew what the aspect ratios were for film, what they looked like, or what the print generations looked like. They started to talk a bit about how they made decisions in the past and so on."

In another example, an organization took a different approach. Instead of regularly scheduling time for presentations, they dedicated **two full days to internal presentations**, during which each employee was encouraged to share their work with colleagues. This format encourages knowledge sharing and collaboration within the organization.

"Not only each department, but each person had to introduce themselves. We were in the cinema, and we would present and summarize and say what we do. What are your tasks and what does that entail? And even though it was a very exhausting day, because we were not few, it was incredibly enlightening."

Organizing and keeping up these presentations, lectures, and classes is challenging. They need to be repeated periodically to keep up with the workflows and projects of other departments, as work and projects evolve over time, and as colleagues leave and new ones join.

"In our organization people change so often that [this information] is of course very quickly no longer accurate. The departments, the focus, or how you work on something changes. If you depict exactly what you have done when

working on a project, it can of course happen that after half a year this is no longer the same thing you do now."

Such internal presentations also require **organization and planning**, for which someone, or a group of colleagues, must feel responsible. **Getting management support** is essential because these activities utilize working time.

Creating Collective Documentation

Several interviewees emphasized the importance of documenting workflows in their respective organizations. The initiative to document workflows can come from **individual colleagues or be a collective effort**. Some colleagues have taken on the task of documenting workflows on their own, often **motivated by the prospect of leaving their position**. In contrast, in some organizations, the creation of workflow documentation has become a collaborative effort involving the active participation of all team members.

"Everyone on staff understood the problem all at once, so there was some momentum behind it. 'Okay, we really do need to write things down.' Since we were running into so many problems because of the lack of documentation, everyone had the goodwill to do it together."

In one example, colleagues began the initiative by identifying needs for documentation in their organization and **finding an appropriate collaborative documentation platform**, in this case, a wiki. They then set up the chosen platform on a dedicated server and configured an initial wiki structure, or index, to match the topics that needed to be covered. Next, team members were assigned permissions to access, manage, and edit wiki pages. Each team member was then given the **responsibility of documenting their workflows, standards, policies, and other information that could be used as a reference for carrying out activities**. They could freely determine both the structure and length of their text.

"One thing that works is that there is no fixed format of how it [workflow documentation] should be written, and this made it easy to start doing it. One of the good things was that the format was open, with only a few guidelines to help make it clear. You could keep it simple, or you could expand. There is no limit to the amount of words either. You can use images."

To ensure clarity and consistency, **colleagues were asked to review each other's contributions** to ensure that the descriptions were understandable to all. In addition, colleagues were encouraged to **regularly update and revise** the parts they contributed to the documentation. In this example, the team is still finding a way to ensure that the documentation does not become outdated, and believes that organizing **annual meetings focused on the collective revision of documentation** could be a useful approach to addressing the problem of outdated documents.

"Every summer people should sit together and discuss: Is this still how we do it? Can we improve it? Not so many people have to work on that, it is just four or five people. It's doable, and if we do it every year, there is no major overhaul."

These efforts resulted in the comprehensive documentation of all workflows, accessible through an internal wiki platform that currently holds a **central repository of mainly organizational knowledge**, but could also come to include technical and collection knowledge.

Colleagues are motivated to document their processes and policies for several reasons. First, it allows individuals to **articulate their own practices and put them in writing**. This documentation can serve as a valuable reference point when needed.

"[The documentation concerns] very basic film handling, how we do things here. And I think this is quite a good way of doing it . . . It helps me because I write it down and I remember it, or if I don't remember it, I can look it up again."

Second, by documenting workflows, colleagues can **provide guidance for their peers**, ensuring **continuity of processes in their absence**. This practice ensures that everyone in the organization understands the standard processes and procedures to be followed.

"It ended up being very useful. Just sharing processes among each other. I do the shipping, and the other two know how to ship, they've had to [when] I go on vacation. It's much more useful now that I've distilled it into a step-by-step document. This is how you use the UPS software for our needs. Here

are the guidelines I try to abide by when I am shipping in terms of rejecting boxes, or writing the tracking number on the side, or this is the way I have been shipping. I tried to explain my reasoning for how and why I do various things."

Third, it helps employees navigate organizational knowledge, **understand the responsibilities of other colleagues** and find out who to turn to for technical and/or collection knowledge within a team.

"We have set up an internal wiki as a knowledge base, so that all the departments would have a place to write down the processes that would be both transparent and understandable to people arriving to the institution or people who already work there but do not necessarily know [the responsibilities of colleagues]. For example, it doesn't happen every day that you need to watch something that's only on a VHS. Okay, so what do you do? Ideally, you would look into the wiki, search for 'VHS' and learn who to ask."

And fourth, documented workflows serve as a **valuable resource when introducing new team members to their roles**, but also as a source of general information they will need when navigating a new workplace.

In addition, documentation can be a **useful reference for future generations**, providing insight into past processes, but only if a conscious effort is made to archive different versions of this documentation created at different points in time, including those that have become outdated. One way to do this would be to implement an **automated backup system and archive** to ensure that the documentation is automatically downloaded at regular intervals and preserved for the long-term.

Organizing Collective Screenings

"People would bring something that they had seen and found good or funny or remarkable in some other way, and then we watched it together."

Internal film screenings can be a way to **develop and share collection knowledge** and **provide an opportunity for interaction among colleagues**. In one example, film screenings are organized once a month in the evening in the archive cinema and last about one and a half hours. Each time, a **different department** is asked to propose a programme that may include one or more films from the collections, but is also open to other titles.

"It is actually always a different department that organizes the evening. And they choose a film."

The criteria for selection are broad, but it should be something they find **interesting and worth sharing with others**. The colleague who selected the film **introduces** the screening and explains the reasons for showing this particular title.

These evenings are an opportunity **to take time to watch films from the collections** and to **share encounters** with the collections that otherwise might not be shared or readily available to all colleagues. In this sense, collective screenings are a way of both sharing and developing knowledge of the collections, as well as providing insight into each other's work, expertise, and interests through introductions.

"Sometimes it's just information about what's going on in another collection, in another department."

By sharing the collection, collective screenings can also **inspire research, public screenings, or other forms of access**. In addition, these evenings bring together colleagues from different departments who might not normally work together directly, or even work in completely different locations (as is often the case with curatorial and archival departments).

"It was very nice as a team building event because of course we all realize that in everyday life we don't see any films from the collection at all and then at least we spent one and a half hours a month watching something and realizing: 'Oh, that's there and that's also exciting,' and that was a very different thing."

Collective screenings can also be used to **collaboratively identify** and describe materials or collection items, as they can draw on the knowledge of multiple colleagues. This can also be done **for other collection items**, as is shown in an example from another archive in which a variation of this event is organized for the purpose of identifying objects. Colleagues would come together in online meetings during a Covid-19 lockdown period to meet and talk about items in the film-related collections. In this example, the focus was on gathering information about both the object and its provenance. More experienced colleagues would draw on their memories and share information about the history and provenance of the objects in the collection. Other colleagues could join in and listen. Much like the collective film screenings, these meetings can serve as a means of sharing and developing collection knowledge in the team.

Planning a Period of Overlap

When a colleague is about to leave, an audiovisual archive faces the risk of losing valuable knowledge. In order to transfer this knowledge to a successor, some organizations make sure there is a **period of overlap** between the retiring colleague and their successor.

A period of overlap allows for a **personal knowledge transfer**. This method allows knowledge sharing to take place **during the time spent working together, where questions can naturally arise**, and is necessary for forms of **knowledge that can only be transferred verbally** or are not documented.

"There was a lot of information that hadn't been written down and that's just shared by talking to each other."

Work processes can be documented and shared with a successor, but **documentation alone is often not sufficient to ensure a full understanding**, since documentation may require additional explaining and some work processes may need to be demonstrated and explained in person. An overlap between two colleagues can also be fruitful in the long run, as shown in an example where two colleagues built a **good relationship during the overlap period and stayed in touch after one of them left the organization**, meaning that this person remains available to answer questions when needed and knowledge sharing can continue.

Although the benefits of overlap are generally acknowledged, it is often **not possible due to lack of resources**. Having two people working in the same position at the same time obviously requires time and financial resources. The longer and more dedicated this period of working together – a period in which there is time to cover the different aspects of the work, to observe the work processes, and in which there is room for discussing mistakes and feedback – the more knowledge can be transferred.

When planning a handover, it is important to be aware of this and plan for a period of overlap **before it is too late**. The **management plays an important role** in recognizing and allowing a period of overlap in a situation where the departure has been announced in advance. It can also stimulate a departing colleague to consider which knowledge could be relevant to their successor.

"You could just make a plan and ask people: 'What's your range of retirement?' I think then you should say: 'You need to look at passing that knowledge on because we don't really want you to walk out the door and we've lost all of that. So, what are the key things you want to convey?' Things like this, sitting down with people and going through the work. 'This is what you should know about, what we do, here are the important things you should focus on.'"

The second step is to **identify the critical information and areas of knowledge and skills** that need to be transferred. This step can be a **collaborative effort** between the departing colleague and their successor. Both can think about what they want to share, what they want to know, and communicate what their expectations for the handover process are. In one example, the colleague who was training his successor made a list of topics he thought were important to discuss.

"He had a list full of things, of topics that we had to talk about. So, for example, the acid testing, the videotape collection, the digitization programme for videotapes, and, basically, where things are at the moment, and where we should go in the future. Actually, we didn't really follow this very strictly. But for one year, on a weekly basis or every couple of weeks, I would sit down with him for a morning of discussion of all the questions that I had. And he was telling me more about the past of the collection."

It was also identified as important that there were **sufficient opportunities for the two colleagues to discuss questions and issues** that arose in the course of their daily work.

"The fact that he had a lot of patience and he dedicated one morning every two weeks to this, so that I could come back with more questions and, you know, say: 'Sorry, but can you take a look at this? I can't understand why it was marked as an archival master, but is actually somewhere else where it shouldn't be.' And so on."

In this example, another important aspect worth pointing out is that the successor learned how to navigate the collection documentation, which they could then use independently. It is helpful to review the documentation left behind by one's predecessors, but for it to be useful and accessible, it is necessary to understand its logic and structure. One way to **improve accessibility is to work together on the departing colleague's documentation**, understanding and improving its structure.

Other aspects to consider when transferring knowledge are the **connections to relevant people outside an organization** (the archival and audiovisual network, relationships with individuals with a connection to the archive). Making introductions and possibly having a look at the documentation that indicates these connections together can go a long way.

Just as in the induction process, a successor can create their own personal documentation by **keeping notes or a handover diary**. Such documentation can serve as a rich source of information when the predecessor is no longer available for consultation.

Capturing Knowledge through Oral History

The practice of oral history can be used to capture the knowledge of colleagues, as demonstrated by several examples. Through **conducting interviews**, colleagues document and preserve knowledge from former colleagues, long-time employees with unique and specialized knowledge, and retiring colleagues who may otherwise take valuable knowledge with them upon their departure.

"When people work in an institution for such a long time, they become the institution themselves. So, I think it would be very respectful to do oral history, also in order to relieve them, like, 'Okay, you can rest, take it easy, this knowledge is no longer only with you.'"

Oral history can be used to **share individuals' personal perspectives and experiences** that are often missing from official written sources and can be more fully conveyed through narration. Such narratives might include personal stories about the history of the organization and the people who work there, and the history and development of the collections. It may also be possible, through conversation, to **elicit knowledge that was previously tacit**. In addition, oral history interviews can **convey the enthusiasm and interest** of interviewees, as certain feelings are often better expressed verbally than in writing.

"I often notice that when people talk about rights, that is perhaps my favourite topic. Because rights information is very poorly documented, I think in almost all archives. And you can say 'Okay, the person has the rights to it now,' but the stories about it are much more exciting and that's really a piece of oral history. If you now ask three people in [country name] about a special rights holder or about a particular lawyer, then everyone has different stories about it."

Oral history is also used to gather **collection-related knowledge from individuals** such as film-makers, donors, and technicians, who aren't part of the organization. For example, interviews with film-makers can be used to document the **process of film-making**, and interviews with donors of amateur film collections can provide biographical stories that are useful in **understanding the content and context** in which these films were made. Interviews with technicians can help in **understanding the practice of (obsolete) media technology**.[18] Audiovisual archives develop oral history initiatives tailored to their specific needs and motivations. Some interviewees gave the example of using oral history as a method of **conducting historical research** to find out more about particular collections. In another example, an **oral history programme** was introduced after the **realization that several long-term colleagues were approaching retirement**. Recognizing the significance of their knowledge, the organization decided to use oral history to capture as much of it as possible. The first step was to gain an overview of the knowledge at risk and the people that should be interviewed: Who has what knowledge? How urgent is the need to capture it? How long has a person worked with a collection? Are they nearing retirement? This overview helped in the creation of an action plan, which included a cost estimate, a time frame, and determined the number of people involved.

Another organization, which began conducting interviews as part of this very research project on knowledge sharing, developed an oral history programme in which employees interviewed colleagues from different departments. Through an open call, an opportunity was created for people from different areas to participate. As word spread through the organization, more and more colleagues expressed interest in participating and were willing to share their knowledge. The initiative evolved into a **cross-departmental oral history programme**, with interviews conducted with a **variety of colleagues in different positions and with different levels of experience**.

"I think it's a great thing to interview people because everyone is really passionate about whatever they're doing, and they're just happy to talk about that."

→ **18** The AMIA initiative of capturing changing technologies shows different approaches of using oral history interviews to record the information and experience around technology.

"I actually got to know a lot of colleagues, and it kind of made me talk to people from other departments, approach different people and also understand them better or find out what they're doing. [I did] an interview with someone in special collections. And at the [organization name] it feels like [everyone's] doing their own thing. He talked to me about a special collection of posters and explained what they were doing, acquisition and all this stuff. And he was someone that I had never talked to because I never needed to interact with him, and now we're on friendly terms. So I think it's going to broaden my network within the [organization name]."

In this example, employees were willing to participate, and the oral history programme even forged new connections and gave colleagues an insight into each other's work. In contrast, another interviewee mentioned that their organization faced challenges in motivating some individuals to participate in an institutional oral history programme because they were initially reluctant. To overcome this issue, the organization strategically **integrated oral history into a larger project tied to the organization's anniversary, which resulted in colleagues feeling honoured to participate and made them more willing to contribute**.

The interviewers described several steps they took in preparation for conducting an interview. The first step was to **discuss the privacy policy** with the interviewee and ask them to sign an informed consent document. The next step was to **conduct research on the interviewee** and their work in the organization, consult other colleagues, and review written materials such as publications and memoirs.

"He had written his memoir, which was really useful. We were able to get a lot of information from his memoir, we were able to compose a lot of questions stemming from that. He had already retired, but indicated that he would be interested in coming back to do the interview."

Once enough information had been gathered, a **questionnaire** was designed for each respondent and tailored to the knowledge the interviewer was looking to elicit. When designing a questionnaire, it has been noted that better results are obtained by asking **focused questions** that relate to a specific topic, as opposed to general questions. In addition, elaborations and detailed answers are stimulated by asking **open-ended questions** instead of yes/no questions. During an interview, interviewers did not necessarily follow the questionnaire, but use it as a guide. The importance of **creating an environment in which the interviewee feels comfortable and safe** has also been stressed.

"[It is important] to be as open as possible and to be as flexible as possible during the interview. Of course, I will not push them to talk about things they don't want to talk about. But that's part of the method as such. And then I think you have to adjust to the person and just respect what he or she wants to talk about or doesn't want to talk about."

There are some recurring problems with conducting interviews. First, some people are **reluctant to discuss certain topics openly when the recorder is on**. This tendency becomes particularly conspicuous when people are asked about the details of an organization's history and their personal experience of difficult times in this history. In such cases, interviewees often provide answers that lean towards diplomacy and provide official versions of events, fearing the potential consequences of expressing personal perspectives. Second, the success of an oral history project may depend on the **relationship between interviewer and interviewee**. Some colleagues may only be willing to participate in oral history discussions with certain individuals, and may be less inclined to participate with others. Third, some colleagues may not be available for interviews. For example, colleagues who left on bad terms are unlikely to return to the organization and participate in the interview process.

Organizations have different ways of **archiving interviews** and **providing employees with access to them**. For example, one organization archives interviews both as audio recordings and transcripts. They increase accessibility by **adding brief summaries of the interviews to the catalogue**, including the interviewee's name and position in the organization. Access to these interviews depends on the privacy agreements with the interviewees. One organization has decided to restrict access to their employees' interviews for a certain period of time. Most importantly, **colleagues should be aware of the existence of oral histories** so that they can reach out and access them.

"But those oral histories now have to be made accessible to staff. And staff have to be encouraged to go searching for them. And they're not really positioned like that at all. There'll be a catalogue entry. How does a staff member

know where to look or who to ask about what? So there needs to be some kind of accessibility mechanism, some guide, something set up to make those oral histories accessible and available to people and then encourage people to go looking for them."

In addition to oral history, there are other approaches to sharing knowledge that also rely on **creating, documenting, and recording conversations**. One example describes the practice of recording roundtable discussions among current and former colleagues that take place annually as part of a local film festival. These discussions are then **transcribed and published** in the festival's catalogue. The transcripts serve as a valuable resource for research on the history of the organization.

Involving Honorary Employees

In audiovisual archives, it is not uncommon for retired colleagues to **remain involved on a part-time, volunteer, or project basis**. In some examples, former senior curators have been given the esteemed titles of "curator at large" or "curator emeritus," allowing them to serve in an **advisory capacity** in the organization after retirement. In another example, an audiovisual archivist who had worked for an organization for more than fifty years has been returning to work one day a week on a freelance basis for the past two decades. During these days, she works on collections acquired during her tenure that benefit from being processed by someone with knowledge of these collections. She also helps **describe and identify materials** where she can apply her material and historical knowledge that her younger colleagues do not have, not to the same extent. She is also **helping with preservation projects** concerning works about which she has unique knowledge, such as the work of a film-maker who is deceased but whom she knew personally and worked with closely.

Because of her long experience with the collections, she has knowledge of past practices, past acquisitions, and past preservation projects, and when **colleagues have questions** related to these topics, they know they can turn to her on Tuesdays for answers.

"She would come in once a week, as she still does. And I remember there was a shoebox that said, 'Ask [archivist's name].' And this box was always full. Because she would be the only one who knew stuff. There was a certain form of documentation but that was very often very cryptic. Because it was just a name and then you would have to ask her who this is. 'That's just a name, the family name, who is [donor's name], tell me about [donor's name].' And then you would find out there was a company called [company name] or a person or whatever."

Not only do the current employees have need of her valuable knowledge of past practices, but she is also the go-to person for **material knowledge**, such as why a preservation project was done the way it was, colloquial names for materials and processes, who worked in the film labs and what the processes were like, or where the information written on cans and reports stems from.

She is involved in current projects, but also in efforts to **preserve and pass on her knowledge to current and future generations of archivists**. For example, colleagues have initiated an ongoing project to create a finding aid for the documentation she has collected over time, which will make her documentation (on past acquisitions, curated programmes, correspondences of all kinds) understandable to others. They also try to be mindful of recording and documenting what they find out about from her, for example, the history of collection objects and their provenance.

"And you have to find a moment when she is concentrated and get stuff out of her and try to write down whatever you learn, enter it into the database or other documents that you can share."

Another way her colleagues have tried to systematically retrieve her knowledge is by organizing workshops. Each workshop focuses on a specific topic (e.g., working with a particular film lab she has worked with), and in preparation, colleagues compile a list of questions that she receives in advance. The workshop takes the form of a one- to two-hour discussion in which the questions are explored. These moments are both direct moments of knowledge sharing among the team as well as ways to preserve knowledge for posterity, since the discussion is recorded and preserved.

Hiring a former colleague on a part-time or project basis, or otherwise engaging retired colleagues, creates the possibility of having someone to go to with questions about the history of collections, past practices, and past technology. It creates a **bridge between current and past practices**, and as such is a way of transferring knowledge from one generation to the next. It also creates an understanding of different ways of working in the past and of how collection work has evolved over time.

The challenges of such a method are that the **sense of urgency to transfer knowledge all at once may not be as strong** because the retired colleague is still present and their presence may be taken for granted.

Creating and Using an Alumni Network

Many organizations and former employees recognize the importance of **maintaining connections between the organization and former colleagues** in order to benefit from the former colleagues' knowledge. There are examples of different approaches to maintaining relationships with former employees, ranging from **formal to informal practices**. For example, a large national archive with a long history has experienced numerous staff transitions and, over the course of these transitions, a significant number of individuals have left the organization, taking invaluable knowledge with them. One way in which they are addressing this issue is the alumni group, initiated by three former employees with the goal of providing expertise and support to the organization. Former colleagues are invited to join the alumni group, provide information about the fields and projects they have worked on, and choose to make their expertise **available to current staff when needed**. This alumni group also plans to organize **social gatherings for alumni** to reconnect with each other.

Another organization took an **informal approach** to filling knowledge gaps left by former colleagues by maintaining and strengthening individual relationships with them. This includes **recognizing their achievements through special gestures** such as featuring their names in publications, including them on guest lists, or naming offices or parts of the collection after them.

"We thought we should name our institution after the first, main collector. I insisted that he was the one who started it. The whole idea was him. After we named it after him, he emptied his house for the archive, totally emptied the house. He would come here every Tuesday with bags. And he would spend every Tuesday with us, adding to the metadata. He would come and pick up a reel-to-reel tape, saying, 'Ah, this one, I captured it in [location name]. It's from [year].' As soon as he'd arrive, we would start filming him."

"Publications, journals. I've done a few peer-reviewed journals about the archive, the collection, and all these people's names were perfectly captured. Anything that acknowledges their work. Even when the people are dead, their family connects with you, because they bring stuff that is locked up in the person's drawers."

Through such approaches, organizations seek to **fill the knowledge gaps left by former colleagues** by providing current employees access to the expertise and unique knowledge of their predecessors. At the same time, these initiatives serve as evidence that the organization **recognizes and values the knowledge of former colleagues**. In both formal and informal approaches to capturing knowledge from former colleagues, personal contact is key. **Direct personal contact** can help establish the necessary connection for effective communication and knowledge sharing.

One issue that became clear from the interviews is that current staff **may not be aware of the availability** of former colleagues for advice and the value of their knowledge to ongoing preservation activities. The management can play a role in addressing this by **promoting the existing alumni network** and **encouraging colleagues to reach out to their predecessors** whenever necessary.

Organizing Technical Workshops

Several colleagues gave examples and suggestions on how to organize technical workshops to **share and improve technical knowledge and skills among colleagues**. In one example, colleagues suggested inviting retired editors to teach and demonstrate **how they used to work** on Steenbeck editing tables to current archival staff. In another example, short workshops were organized on **how to repair tools and equipment**. A colleague from another archive used the time during the lockdown to organize online meetings for **workshops on film identification** to enhance the knowledge of their colleagues, who had a lot of hands-on experience, but lacked a deeper understanding necessary for film identification. The incentive for all of these workshops is similar: to **harness and level the different levels of expertise within the archive when it comes to technical skills and knowledge and share knowledge that had never been shared before**.

"And then there are these little workshops for repairing things. Because what's very nice is that in the film departments, we have people who come from very theoretical backgrounds, and also people who come from experience-based work. It's really important that they can share their vision of the things because sometimes it's quite difficult to make them meet and work together."

The incentive for these workshops is often the result of **an identified knowledge gap** and a felt **need to raise the level of knowledge and skills among colleagues**. These workshops are a method of sharing technical knowledge and skills **held by experts or retired colleagues**, but they can also be a way of drawing on the expertise of **people from related technical areas** such as media production, post-production and film labs. Once the gaps and expertise have been identified, and depending on the topic, one can decide on an appropriate format for the workshop. For technical processes, **hands-on demonstration and instruction may be most useful**, or even absolutely necessary, in order to impart concrete and practical

knowledge. For other types of technical explanations, such as film identification, **online meetings can be used to share visual examples**. In fact, this method can be advantageous because multiple people can look at an example at the same time, which may not be possible otherwise.

Technical workshops can be recorded to document explanations in combination with handling equipment.[19] As one colleague mentioned, this documentation could be a possible way of capturing someone's **embodied or instinctual knowledge** that might be difficult to pass on otherwise. Audiovisual documentation of demonstrations, explanations of equipment and work processes could also be **combined with oral history**.

By organizing technical workshops with external experts, archives can become **repositories of knowledge and skills** related to the media they use, media that may have become obsolete in the industry.

"Yes, I call it the knowledge-is-power kind of syndrome, where they [engineers and technicians] want to keep their cards close to their chest. And you just can't get external training in areas like obsolete equipment operations. One used to be able to go and get training for doing different things in different aspects. But it's very limited as the market reduces and continues to contract. There are less places where you can get that skill set. And a lot of it is hands-on and how do you say to someone, 'Come to the organization, we're going to train you how to fix VHS decks,' when it's a completely obsolete format? In a few years' time, no one's going to need it. And what's the drive to get them into that place? It's very, very tricky. So we are desperately holding on to the skills we have."

→ **19** There are several noteworthy examples of audiovisual recordings of technical explanations and reenactments, such as videos about how televisions used to be made, produced by ADAPT, a research project on the history of television production technology, and the episodes on cinematographic techniques explained in the videos produced by TECHNÈS.

"We can't take an entire generation's memories and digitally download them into another generation. But there's probably more that could be done in focused ways. We can hit certain points of institutional or generational knowledge transfer that, even if they don't achieve everything that they could, will still do more than would have been achieved if it had never been attempted."

About the authors

In 2018, the authors of this book initiated the research project *Share That Knowledge: Finding Strategies for Passing Knowledge across Generations of Archivists.* When the project received funding in 2020, they were able to conduct the research that eventually led to this book. They steadfastly pursued knowledge in its many forms as both project managers and main researchers, as part of their regular jobs.

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Knowledge about audiovisual collections is an intangible aspect of our audiovisual heritage in dire need of our attention. Unless we find appropriate and effective ways to share this knowledge, we face the risk of losing it altogether. This "road map" has been created as a springboard for improving knowledge sharing practices in audiovisual archives by providing comprehensive insight into the many forms this knowledge can take. The book aims to provide both theoretical and practical guidance for audiovisual archivists, managers working in audiovisual archives, and anyone else interested in preserving and sharing knowledge about audiovisual collections.

The book opens with eight insights about knowledge sharing in audiovisual archives that emerged from our research. Throughout this publication, we explore knowledge sharing from several perspectives. First, we examine the different areas of knowledge that play an essential role in audiovisual preservation and sharing, ranging from organizational knowledge to technical knowledge and skills. Second, we look at different scenarios that require special attention when it comes to knowledge sharing, such as starting or leaving a job. These two chapters introduce the topic by presenting our research findings and stimulate reflection through exercises related to them. The suggested exercises are intended to help establish or improve existing knowledge sharing practices. The final part of the book suggests several concrete knowledge sharing methods.

This book is the result of an extensive qualitative research study on knowledge sharing in audiovisual archives, based on interviews and conversations conducted by and with colleagues in the field worldwide. The results of the research have been translated into this "road map" to raise awareness of the importance of knowledge sharing in the context of audiovisual preservation and to advocate the urgency of making knowledge sharing an integral part of the mission of audiovisual archives.

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