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EXPERTISE

Experienced Purchasers Education Research Transfer for Industry 4.0 Skills Expertise

White paper for work package 2:
Insights from expert interviews

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Abstract:	<p>This whitepaper presents a comprehensive analysis of the training needs and requirements of silver workers—employees aged 50 and above—in Purchasing and Supply Management (PSM) roles. Drawing on expert interviews with silver workers and HR managers, this study explores key themes related to training methods, organizational culture, and individual characteristics of older employees. The first part of the results provides a general summary of the responses, categorized according to the sections of the questionnaire such as Recognition, Integration, Adaptability, and Technology. This segment reflects common themes and patterns identified across all interviews, offering a broad view of the experiences and perspectives of silver workers and HR managers regarding the training and integration of older employees within PSM departments. The second part delves deeper into the specific requirements and needs for training silver workers, utilizing MAXQDA for a rigorous qualitative analysis. This method allowed for the precise identification and comparison of key themes, resulting in the categorization of 14 training methods and characteristics, 10 aspects of organizational culture, and 8 individual characteristics of silver workers. These categories provide actionable insights for developing effective, targeted training programs that address the unique challenges and leverage the strengths of older employees.</p>

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1. Introduction

In an era marked by rapid digital transformation, the workforce landscape is undergoing significant changes. As organizations adapt to new technologies and methodologies, it is essential to ensure that all employees, regardless of age, are equipped to thrive in this evolving environment. This whitepaper presents the findings from a series of expert interviews conducted with the Expertise project consortium, which specializes in developing and implementing training programs tailored for "silver workers"—employees over the age of 50—in the field of purchasing and supply management.

The primary objective of these interviews was to gather comprehensive data on the requirements and best-practice methods for skill measurement tools and teaching methods. This information is crucial for creating a well-founded concept of both outcomes. The study examined these aspects on two levels: individual and organizational, providing a holistic view of the challenges and opportunities faced by silver workers.

The Expertise project consortium understands the evolving needs of the workforce, particularly the importance of equipping seasoned professionals to excel in a digitalized environment and collaborate effectively with digital immigrants. By focusing on HR managers, this study aimed to gain a deeper understanding of the environments in which silver workers operate and the specific challenges they face. These challenges include the transformations brought about by digitalization, changes in working methodologies, technologies, and tasks.

The ultimate goal of the consortium is to design learning materials and qualification programs that are tailored exclusively to the needs of silver workers. This approach is intended to support HR departments in ensuring their older workforce acquires the most relevant skills, thereby enhancing their efficiency and effectiveness in their roles. By doing so, Expertise consortium aspire for their skill measurement tool and corresponding learning materials to be recognized and adopted by HR departments and industrial partners across Europe.

While the primary emphasis is on silver workers in purchasing and supply management roles, insights about silver workers in decision-making positions within organizations are also immensely valuable. The consortium is confident that the collaboration and

insights gathered from these expert interviews will impact their ability to prepare silver workers to excel in the modern digital workspace.

2. Description of interviews process

The interview process for this study was meticulously designed and coordinated by the University of Economics in Bratislava (EUBA), with Lappeenranta University of Technology (LUT) serving as the WP-Support and co-supervisor. Contributing to this effort were TU Dortmund (TUDO) and the University of Twente (UT), ensuring a diverse and comprehensive approach across multiple European countries.

Each partner conducted expert interviews within their respective countries, utilizing their native languages to facilitate a more comfortable and effective communication environment for the respondents. A total of 22 interviews were conducted by each of the four partners, culminating in a robust dataset from a diverse array of sources.

The primary respondents for these interviews were silver workers employed in purchasing and supply management (PSM) departments. Additionally, less than one-third of the respondents were HR managers, providing valuable insights from both operational and managerial perspectives. To maintain the integrity and confidentiality of the responses, all interviews were conducted anonymously. No personal identifiers were associated with the responses, ensuring that participants could speak freely without concerns about their privacy.

Although the interview sessions were recorded, this was strictly for the purposes of data collection and subsequent evaluation. The consortium took stringent measures to ensure that these recordings were not shared or distributed in any manner that could potentially compromise the anonymity of the respondents. Each interview typically lasted around 45 minutes, allowing ample time to delve into the various aspects of the respondents' experiences and perspectives.

To analyze the collected data, the interviews were processed using MAXQDA software. This tool facilitated a thorough and systematic analysis, enabling the consortium to identify key themes, patterns, and insights that would inform the development of effective skill measurement tools and training programs tailored to the needs of silver workers in purchasing and supply management.

Through this rigorous and well-structured interview process, the consortium was able to gather valuable data that will contribute significantly to the understanding and addressing of the unique challenges faced by silver workers in a rapidly digitalizing work environment.

Conducting the interviews for this study was a lengthy and challenging process, reflecting the complexity and sensitivity of the subject matter. Finding HR managers and silver workers who were willing to share their experiences required considerable effort and persistence. One of the primary challenges was identifying HR managers and silver workers who were open to discussing their experiences and perspectives. Given the sensitive nature of the topics, many potential participants were hesitant to share their insights, fearing potential repercussions or feeling uncomfortable with the subject matter.

3. Description of questionnaires for silverworkers and HR managers

In the effort to comprehensively understand the needs and challenges faced by silver workers within the Purchasing and Supply Management (PSM) departments, the consortium have designed detailed questionnaires for both silver workers and HR managers. These questionnaires aim to capture valuable insights from both perspectives, ensuring a well-rounded understanding of the organizational environment and the specific training requirements for older employees.

While the number of questions in each questionnaire varies, both are structured around the same five key sections: Opener, Recognition, Integration, Adaptability, and Technology. These sections are designed to capture valuable insights from both perspectives, ensuring a well-rounded understanding of the organizational environment and the specific training requirements for older employees.

Sections Overview:

1. Opener: This section gathers basic information about the respondents, such as their roles, experience, and departmental context. It sets the stage for the rest of the questionnaire by providing essential background information.
2. Recognition: This section explores how the organization recognizes and addresses the training needs of silver workers. It delves into the evolving roles

of aging employees, the adequacy of existing training programs, and specific skills that may be missing from current training materials.

3. **Integration:** This section examines the mechanisms and strategies employed by the organization to integrate new skills and technologies. It looks into the processes for identifying training content, addressing challenges specific to silver workers, and evaluating the effectiveness of training programs.
4. **Adaptability:** This section investigates the organization's agility in adapting to emerging trends and technologies, with a particular focus on silver workers. It explores the methods used to tailor training content for older employees and the criteria for measuring the effectiveness of these programs.
5. **Technology:** The final section assesses the role of technology in addressing the challenges faced by silver workers. It explores how technology is utilized to support older employees, their adaptability to new technologies, and the need for specialized training to facilitate this adaptation.

By structuring the questionnaires around these five sections, we aim to provide a comprehensive view of the current state and future needs of silver workers. This approach will enable the development of effective training programs and skill measurement tools tailored to their unique requirements, ultimately supporting their continued success and integration within the modern digital workspace.

3.1 Questions for silver workers

The questionnaire for silver workers focuses on their personal experiences, training needs, and adaptability to new technologies and methodologies. It is structured to explore their roles, recognition within the organization, integration of new skills, adaptability to evolving trends, and the impact of technology on their work.

Part 1: Opener

This section sets the stage by gathering basic information about the respondents and their departmental context.

Q1: What is your position in PSM?

The purpose of this question is to understand the respondent's specific role within the PSM department. This provides context for their insights and opinions. This question helps categorize respondents based on their job titles and responsibilities, allowing for a nuanced analysis of responses based on different roles.

Q2: Can you describe the composition of your department, especially in terms of age and experience levels of the employees?

The purpose of this question is to gain insight into the demographic makeup of the department, focusing on the age and experience levels. This question seeks to understand the diversity within the team, including the distribution of younger and older employees, and the range of experience levels. This information is crucial for assessing the dynamics and potential training needs specific to different age groups.

Part 2: Recognition

This section focuses on how the organization recognizes and addresses the training needs of silver workers.

Q3: How has the role of aging individuals in PSM or your department evolved over time?

The purpose of this question is to explore the changes in roles and responsibilities of aging employees within the department. This question examines historical shifts in how older employees are perceived and utilized, providing insights into organizational adaptation to an aging workforce.

Q4: Which skills do you believe will be crucial for your career growth in the coming years?

The purpose of this question is to identify the future skill requirements as perceived by the respondents. Respondents are asked to reflect on their personal career aspirations and the skills they deem necessary to achieve them. This helps in understanding their future training needs.

Q5: Do you think Silver workers are fully addressed with existing training?

The purpose of this question is to assess the adequacy of current training programs for silver workers. This question evaluates whether the existing training materials and programs meet the needs of older employees.

Supporting Q5.1: If not: How can the training methods or materials be enhanced?

The purpose of this question is to gather suggestions for improving current training programs. This follow-up question seeks specific recommendations on how to tailor training materials and methods to better serve silver workers.

Q6: How are Silver Workers' needs addressed within existing training materials?

The purpose of this question is to understand how well current training programs cater to the needs of silver workers. Respondents are asked to comment on the inclusivity and relevance of existing training materials in addressing the specific needs of older employees.

Q7: What PSM (or other work-related) skills do you believe are absent from your training materials?

The purpose of this question is to identify gaps in the current training materials. This question highlights any missing skills that are crucial for the effective performance of silver workers but are not currently covered in training programs.

Part 3: Integration

This section explores how the organization integrates new skills and technologies, particularly for silver workers.

Q8: Do you encounter specific obstacles when trying to develop the skills required for your position?

The purpose of this question is to identify barriers to skill development for silver workers. This question probes into the challenges and obstacles that older employees face when attempting to acquire new skills, whether due to organizational, technological, or personal reasons.

Q9: When the company introduces a new approach or technology, what is the procedure to align it with silver workers' requirements?

The purpose of this question is to understand the processes in place for integrating new technologies and approaches with the needs of silver workers. Respondents are asked to describe the steps taken by the organization to ensure that new technologies and methodologies are accessible and beneficial to older employees.

Part 4: Adaptability

This section investigates the organization's adaptability to emerging trends and technologies and its impact on silver workers.

Q10: What are the requirements for long-term integration of Silver Workers into the organization?

The purpose of this question is to explore strategies for ensuring the long-term inclusion of silver workers. This question looks at the policies and practices that support the continued employment and integration of older employees within the organization.

Q11: How are you or the department trained in your company and how are the training methods implemented?

The purpose of this question is to examine the current training practices and their implementation. Respondents are asked to detail the training programs available to them and the methods used to deliver these programs, focusing on effectiveness and accessibility.

Q12: Do you have the possibility to evaluate training?

The purpose of this question is to assess the feedback mechanisms for training programs. This question explores whether respondents have opportunities to provide feedback on training programs and the extent to which their feedback is considered.

Supporting Q12.1: If YES, do you suggest specific improvements tailored to Silver Workers' training needs?

The purpose of this question is to gather specific suggestions for enhancing training programs based on feedback. This follow-up question seeks detailed recommendations on how training programs can be improved to better meet the needs of silver workers.

Part 5: Technology

The final section assesses the role of technology in addressing the challenges faced by silver workers.

Q13: Do you utilize technology to address challenges associated with an aging workforce?

The purpose of this question is to explore the use of technology in supporting older employees. Respondents are asked to describe the technological tools and solutions used to address the unique challenges faced by an aging workforce.

Supporting Q13.1: Do Silver Workers easily adapt to new technologies?

The purpose of this question is to assess the adaptability of silver workers to new technologies. This question examines how easily older employees can learn and use new technologies introduced in the workplace.

Supporting Q13.2: Does this require specialized training for Silver Workers?

The purpose of this question is to identify the need for specialized training programs for silver workers. Respondents are asked whether additional, targeted training is necessary to help older employees effectively utilize new technologies.

3.2 Questions for HR managers

Similarly, the questionnaire for HR managers is designed to investigate how issues related to silver workers are acknowledged and addressed at the organizational level. This includes examining HR practices, training development, integration strategies, and the use of technology to support an aging workforce.

Part 1: Opener

This initial section aims to gather basic information about the HR managers and their professional background.

Q1: What is your position in HR?

The purpose of this question is to understand the respondent's specific role within the HR department, providing context for their insights and opinions. This question helps categorize respondents based on their job titles and responsibilities, allowing for a nuanced analysis of responses based on different roles.

Q2: What kind of experience do you have with developing or providing trainings for employees?

The purpose of this question is to gauge the respondent's experience in employee training and development. This question seeks to understand the depth and breadth of the respondent's involvement in training programs, which is crucial for evaluating their insights on training needs and practices.

Q3: How many years are you at your current position?

The purpose of this question is to determine the respondent's tenure in their current role. This information helps contextualize their experience and familiarity with the organization's HR practices and policies.

Part 2: Recognition

This section focuses on how the organization recognizes and addresses the training needs of silver workers.

Q4: Do you think that the average age of employees (in the procurement department, if applicable) is raising over time?

The purpose of this question is to explore trends in the age demographics of employees within the department. This question assesses whether there is a noticeable trend in the aging workforce.

Supporting Q4.1A: If yes: What do you consider as the reason for the increasing age of employees?**Supporting Q4.1B: If not: What do you consider as the reason for the decreasing (stable) average age of employees?**

The purpose of these questions is to understand the factors contributing to changes in the age demographics of employees. These supporting questions delve into the reasons behind the observed trends, providing insights into organizational dynamics and workforce planning.

Q5: How do you take Silver Workers into account within HR activities (e.g., onboarding)?

The purpose of this question is to examine how HR practices are tailored to address the needs of silver workers. This question evaluates the inclusivity of HR activities in considering the specific needs of older employees.

Supporting Q5.1: How do you take silver workers into account when you are preparing training for employees?

The purpose of this question is to assess the extent to which training programs are customized for silver workers. This question seeks specific strategies and practices used to ensure training programs are relevant and effective for older employees.

Supporting Q5.2: Do you take the age of newly hired employees into account when you are preparing onboarding procedures?

The purpose of this question is to explore whether onboarding processes are tailored based on the age of new hires. This question examines the adaptability of onboarding procedures to meet the needs of employees of different age groups.

Supporting Q5.3: What are the requirements to integrate Silver Workers into the organization in a long-term way?

The purpose of this question is to identify the strategies and practices necessary for the long-term integration of silver workers. This question seeks to understand the policies and support mechanisms in place to ensure the sustained inclusion of older employees.

Supporting Q5.4: Are there specific requirements for Silver Workers in PSM?

The purpose of this question is to determine if there are unique considerations for silver workers within the PSM department. This question explores whether the nature of PSM roles necessitates particular approaches to training and integration for older employees.

Part 3: Integration

This section explores how the organization integrates new skills and technologies, particularly for silver workers.

Q6: How do you identify training content?

The purpose of this question is to understand the methods used to determine the content of training programs. This question examines the processes and criteria used to identify training needs and develop relevant materials.

Q7: What specific challenges arise when training employees in PSM departments or in decision-making positions?

The purpose of this question is to identify challenges specific to training employees in specialized roles. This question seeks to uncover any difficulties faced in providing effective training for employees in PSM or leadership positions.

Supporting Q7.1A: If yes: Are there specific requirements related to the employee's age?

Supporting Q7.1B: If no: Are there any specific requirements within the entire organization which are age-dependent?

The purpose of these questions is to explore whether age-related factors influence training requirements. These supporting questions delve into the age-related considerations in training programs, both within specific departments and across the organization.

Q8: How does the company evaluate the effectiveness of its employee training programs and initiatives?

The purpose of this question is to understand the evaluation methods used to assess training effectiveness. This question examines the metrics and feedback mechanisms in place to measure the success of training programs.

Q9: How are Silver Workers specifically addressed with existing training materials?

The purpose of this question is to evaluate the inclusivity of current training programs for silver workers. This question assesses whether existing training materials adequately meet the needs of older employees.

Supporting Q9.1: Should they be approached differently compared to younger individuals?

The purpose of this question is to determine if the organisations perceive that there should be a differentiated approach in training silver workers. This question explores whether organisations perceive potential need for customized training strategies for older employees.

Q10: When the company wishes to introduce a new approach or technology to processes, what procedures are in place to ensure alignment with the requirements of silver workers?

The purpose of this question is to understand the processes for integrating new technologies with the needs of older employees. This question examines how the organization ensures that new technologies are accessible and beneficial to silver workers.

Part 4: Adaptability

This section investigates the organization's adaptability to evolving trends and technologies and its impact on silver workers.

Q11: Do you use a specific method to identify specific content for silver workers?

The purpose of this question is to explore the methods used to tailor training content for silver workers. This question assesses whether there are specialized approaches to developing training materials for older employees.

Q12: Do you provide specific evaluation criteria to measure the effectiveness of the training programs tailored for silver workers?

The purpose of this question is to understand how the effectiveness of training programs for silver workers is measured. This question examines whether there are distinct evaluation metrics for training programs aimed at older employees.

Q13: What are the preferred training methods within your company, how are these methods implemented, and why are they chosen?

The purpose of this question is to identify the training methods used and the rationale behind their selection. This question explores the training methodologies preferred by the organization, their implementation, and the reasons for choosing these methods.

Part 5: Technology

The final section assesses the role of technology in addressing the challenges faced by silver workers.

Q14: Does the company utilize technology to address challenges posed by an aging workforce?

The purpose of this question is to explore the use of technology in supporting older employees. This question examines the technological tools and solutions used to address the unique challenges faced by an aging workforce.

Supporting Q14.1: Do silver workers adapt to the introduction or use of new technology?

The purpose of this question is to assess the adaptability of silver workers to new technologies. This question examines how easily older employees can learn and use new technologies introduced in the workplace.

Supporting Q14.1A: If yes, does this necessitate specialized training for silver workers?

The purpose of this question is to identify the need for specialized training programs for silver workers. This question explores whether additional, targeted training is necessary to help older employees effectively utilize new technologies.

4. The summary of interview results

The results section of this whitepaper is divided into two parts, each offering distinct insights derived from the extensive interviews conducted with silver workers and HR managers.

The first part provides a general summary of the responses, categorized according to the sections of the questionnaire: Opener, Recognition, Integration, Adaptability, and Technology. This segment represents the overarching findings of the researchers, reflecting common themes and patterns identified across all interviews. It offers a broad view of the experiences and perspectives of silver workers and HR managers regarding the training and integration of older employees within Purchasing and Supply Management (PSM) departments.

The second part of the results section delves deeper into the specific requirements and needs for training silver workers. This rigorous analysis was conducted using MAXQDA, a professional software tool designed for qualitative data analysis. By employing this software, the research team developed a comprehensive coding list and scheme, enabling a more scientific and systematic examination of the interview data. This method allowed for precise identification and comparison of key themes, providing a robust foundation for understanding the training needs and preferences of silver workers in a detailed and empirically grounded manner.

4.1 Overview of answers from silver workers

The roles held by silver workers within Purchasing and Supply Management (PSM) departments are varied, including positions such as acquisition experts, department heads, and strategic purchasers. The age composition of these departments typically skews towards employees over 40, with a several employees over 50. The presence of both younger and older employees indicates a diverse team dynamic where mentoring and knowledge transfer are crucial. Many silver workers have extensive experience not only in purchasing but also in other related fields, which they bring to their current roles.

In term of **the recognition**, silver workers generally feel that their training needs are not fully addressed by existing programs. Many reported that they had not undergone formal training and relied on consulting with experts or superiors when needed. There is a significant call for more structured training materials and procedures, such as brochures and documented workflows. Key skills that silver workers feel are lacking include technology proficiency, such as using Excel and the internet. Some silver workers noted that the training basics are present but prefer hands-on or visual learning methods over manuals.

Regarding **the integration**, silver workers face obstacles in skill development, particularly when new technologies or approaches are introduced. The typical procedure involves informing employees via email and offering personal consultations if needed. However, there is often a lack of tailored training to accommodate these new technologies. Some respondents mentioned that having more time to familiarize themselves with new materials would be beneficial. There is a consensus that continuous education and hands-on learning are crucial for integrating new skills.

The adaptability among silver workers is supported through continuous education and reintroduction to new technologies. They often rely on a combination of hands-on experience and assistance from colleagues to adapt to new systems and processes. However, formal opportunities to evaluate and improve training programs tailored specifically for older employees are seldom utilized. Silver workers emphasize the importance of communication and collaboration within teams to support adaptability. They value the ability to provide feedback and receive practical, context-specific training that directly applies to their daily tasks.

Regarding **the technology**, most of the silver workers mention not having problems to adapt to new technologies, especially when they see the benefits in making their work easier. The primary challenge is the lack of formalized, targeted training programs to address the specific technological needs of older employees. Respondents highlighted the importance of practical, hands-on training methods for technology adoption, suggesting that interactive and experiential learning approaches are more effective than traditional classroom settings.

4.2 Overview of answers from HR managers

HR managers interviewed hold roles such as HR generalist and are responsible for a range of activities including recruiting, training, and onboarding. They have varied years of experience, typically in the range of two to several years in their current positions. One HR manager described their focus on both external and internal training, highlighting their hands-on experience in preparing and delivering training sessions. Another mentioned handling all HR-related matters from recruiting to payroll and employee well-being.

In term of **the recognition**, HR managers acknowledge that the average age of employees is either stable or decreasing due to retirements and younger hires. They noted that training and onboarding procedures do not specifically cater to older employees. Instead, training is based more on experience and team fit rather than age. However, there is recognition of the need to integrate soft skills training, such as communication and conflict resolution, to support the long-term inclusion of silver workers. One HR manager emphasized the importance of forming homogeneous training groups to ensure effectiveness, suggesting that a more tailored approach to training might be beneficial.

Regarding **the integration**, HR managers determine training content through departmental supervisors who identify current challenges and needs. A significant issue is the broad scope of training programs, which can be overwhelming for employees, making it difficult to retain all the information presented. Training effectiveness is typically evaluated through feedback forms and questionnaires, with no specific focus on the age of employees. The process of determining training needs is often decentralized, with department heads playing a crucial role in identifying and addressing training requirements. This decentralized approach can lead to

inconsistencies in how training is provided and evaluated across different departments in the companies.

In regard to **the adaptability**, HR managers indicate that the organization's adaptability to new trends and technologies is generally not tailored to the specific needs of older employees. Training methods vary, including face-to-face sessions, online courses, and a combination of both. The preference is generally for face-to-face training, especially for complex topics that benefit from direct interaction. There is no specific method used to identify training content for older employees, and all staff are trained uniformly regardless of age. This lack of differentiation can lead to older employees feeling left behind or overwhelmed by new technologies.

The use of **the technology** to address the challenges of an aging workforce is not a primary focus. While technology such as robotics and AI is being introduced, it is not specifically tailored to older employees. Training on new technologies is provided uniformly, with no additional support mechanisms specifically for silver workers. HR managers noted that older employees generally adapt to new technologies, albeit sometimes requiring more time and practice. There is a recognition that the pace of technological change can be daunting for older employees, and more tailored support might be beneficial.

5. Analysing requirements and needs for training silver workers using MAXQDA

In the second part of the results, we focus on a comprehensive analysis of the requirements and needs for training silver workers, utilizing the professional qualitative analysis software MAXQDA. This in-depth analysis has revealed three main areas of interest crucial for understanding and addressing the training needs of older employees in Purchasing and Supply Management (PSM) roles.

Areas of Interest:

Training Methods and Characteristics: This area explores the diverse training methods and their specific characteristics that are most effective for silver workers. Through rigorous analysis, we have identified 14 distinguishable categories that highlight various aspects of training delivery, content, and preferences. These

categories provide insights into how training programs can be tailored to meet the unique needs of older employees, ensuring their skills remain relevant and up-to-date.

Organisational Culture:The second area covers the broader organizational context in which silver workers operate. Here, 10 unique categories were identified, each shedding light on how the culture within an organization influences the effectiveness of training programs. These categories include factors such as mentorship, knowledge transfer, and the overall attitude towards continuous learning and development. Understanding these cultural elements is essential for creating an environment that supports and values the contributions of silver workers.

Individual Characteristics of Silver Workers: The final area focuses on the personal attributes and preferences of silver workers that impact their training needs. Eight distinct categories were identified, reflecting the specific challenges and strengths of older employees. These categories encompass aspects such as resistance to change, technology skills, and communication with younger colleagues. Recognizing these individual characteristics is key to developing personalized training approaches that enhance engagement and effectiveness.

The following sections provide a detailed description of these categories, offering a nuanced understanding of the requirements and needs for training silver workers. The order of categories within each area of interest—Training Methods and Characteristics, Organisational Culture, and Individual Characteristics of Silver Workers—is determined by the frequency with which each category was mentioned in the interviews. This approach ensures that the most commonly discussed and significant themes are presented first, providing a clear and prioritized understanding of the training needs and requirements for silver workers. The overview of categories is presented in Table 1.

Area of interest	Category	Occurrence
Training methods and characteristics	Online vs. in-person	19
	Individual needs	15
	Training evaluation	14
	Information material	11
	Demand orientation instead of age	7
	Learning pace	6
	Cross-generation learning	5
	New formats	5

	Timing	5
	Linking with practice and examples	4
	Open exchange platform	3
	Cross-functional learning	2
	Homogeneous skill level	2
	Sensitise to potential learnings	1
Organisational culture	Support function (Mentor)	12
	Definition of training needs	10
	External training offers	5
	Appreciation and integration of silver workers	5
	General training needs in PSM	4
	Communication and knowledge exchange	4
	Positioning of employees	4
	Knowledge transfer (old to young)	4
	Reverse knowledge transfer (young to old)	4
	No time for training	1
Individual characteristics of silverworkers	Resistance and mentality	27
	Technology skills and challenges	23
	Tailored level of support	18
	Specialised skills	12
	Experience and knowledge of silverworkers	11
	Strategic overview	7
	Communication with younger employees	2
	Language skills (English)	2

Table 1 Overview of categories based on coding scheme

5.1 Requirements for training methods and characteristics

1. Online vs. In-Person: Training programs should offer a balance between online and in-person sessions to accommodate different learning preferences among silver workers. This approach ensures that those who prefer face-to-face interaction and those who are comfortable with digital platforms both receive effective training.

2. Individual Needs: Training programs should be customized to address the specific needs of each silver worker, considering their previous experience, current skill levels, and learning pace.

3. Training Evaluation: Training effectiveness should be regularly evaluated through feedback forms and practical assessments to ensure that silver workers are gaining the necessary skills and knowledge.

4. Information Material: Provide comprehensive and accessible training materials, including detailed brochures and step-by-step guides, to support the learning process of silver workers.

5. Demand Orientation Instead of Age: Training programs should be designed based on the demands of the job and individual capabilities rather than the age of the employees, ensuring relevance and practicality.

6. Learning Pace: Allow ample time for silver workers to assimilate new information, with repeated exposure to reinforce learning, accommodating their often slower learning pace compared to younger colleagues.

7. Cross-Generation Learning: Encourage cross-generational learning opportunities where younger and older employees can share knowledge and skills, fostering a collaborative learning environment.

8. New Formats: Implement new and innovative training formats, such as interactive workshops, virtual reality simulations, and gamified learning modules, to engage silver workers more effectively.

9. Timing: Schedule training sessions at convenient times and ensure they are not too lengthy to avoid overwhelming the silver workers, allowing them to absorb information effectively.

10. Linking with Practice and Examples: Integrate practical examples and hands-on practice into training sessions to help silver workers apply theoretical knowledge to real-world scenarios.

11. Open Exchange Platform: Create platforms for open exchange of ideas and experiences among employees, facilitating mutual learning and support.

12. Cross-Functional Learning: Promote cross-functional training that allows silver workers to gain insights and skills from different departments, enhancing their versatility and value within the organization.

13. Homogeneous Skill Level: Form training groups based on similar skill levels to ensure that all participants can learn at an appropriate pace without feeling left behind or bored.

14. Sensitize to Potential Learnings: Raise awareness about the benefits and potential learnings of training programs, encouraging silver workers to participate actively and with an open mind.

5.2 Requirements for organisational culture

1. Support Function (Mentor): Establish a robust mentorship program where experienced employees support and guide younger colleagues. This fosters a culture of continuous learning and knowledge transfer, benefiting both the mentor and the mentee.

2. Definition of Training Needs: Implement a systematic process for defining training needs based on thorough assessments and feedback from employees. This ensures that training programs are relevant and address the actual skills gaps within the organization.

3. External Training Offers: Leverage external training providers to offer specialized courses that may not be available internally. This broadens the range of learning opportunities for employees and introduces fresh perspectives and expertise.

4. Appreciation and Integration of Silver Workers: Develop policies and practices that recognize and integrate the contributions of silver workers, ensuring they feel valued and included within the organization. This can improve morale and retention among older employees.

5. General Training Needs in PSM: Create comprehensive training modules that cover the fundamental skills required in Purchasing and Supply Management (PSM).

These should include both technical and soft skills to ensure well-rounded professional development.

6. Communication and Knowledge Exchange: Promote open communication and knowledge exchange across all levels of the organization. This encourages collaborative problem-solving and continuous improvement through shared experiences and insights.

7. Positioning of Employees: Strategically position employees in roles that match their skills and experience levels, ensuring they can contribute effectively to the organization while also having opportunities for growth and development.

8. Knowledge Transfer (Old to Young): Facilitate structured knowledge transfer programs where experienced employees impart their expertise to younger colleagues. This ensures valuable institutional knowledge is retained and passed on.

9. Reverse Knowledge Transfer (Young to Old): Encourage younger employees to share their insights, particularly on new technologies and modern practices, with older colleagues. This reciprocal learning approach fosters mutual respect and comprehensive skill development.

10. No Time for Training: Address time constraints by integrating training into the regular work schedule and ensuring it is prioritized. This might involve shorter, more frequent training sessions that fit into employees' busy schedules.

5.3 Requirements for individual characteristics of silver workers

1. Resistance and Mentality: Implement strategies to address resistance to change among silver workers by fostering a supportive environment and emphasizing the benefits of new initiatives. This includes offering psychological support and creating a culture that values continuous learning and adaptation.

2. Technology Skills and Challenges: Develop targeted training programs that enhance the technology skills of silver workers, focusing on user-friendly tools and gradual learning curves. Provide continuous support and troubleshooting assistance to help them overcome challenges.

3. Tailored level of support: Recognize that some silver workers may require less direct support due to their extensive experience and self-sufficiency. Tailor support levels based on individual assessments rather than age-based assumptions.

4. Specialised skills: Leverage the specialized skills of silver workers by assigning them tasks that align with their expertise and providing opportunities for them to mentor others in these areas. This not only utilizes their strengths but also facilitates knowledge transfer.

5. Experience and Knowledge of Silver Workers: Capitalize on the extensive experience and knowledge of silver workers by involving them in strategic decision-making processes and critical projects. Their insights can significantly contribute to the organization's success.

6. Strategic Overview: Encourage silver workers to participate in strategic planning and provide them with the necessary tools and training to develop a broader organizational perspective. This helps in aligning their experience with the company's long-term goals.

7. Communication with Younger Employees: Facilitate open communication channels between silver workers and younger employees to promote mutual understanding and respect. Structured programs such as cross-generational workshops can help bridge communication

8. Language Skills (English): Provide language training for silver workers to improve their proficiency in English, especially if it is critical for their roles. This can include both formal courses and practical usage scenarios to enhance their confidence and effectiveness.

Within the interviews there were also identified incentives for training of silverworker which can be divide as internal and external drivers.

Internal Drivers

Internal drivers are factors within the organization that motivate the need for training and development. These drivers are influenced by the company's internal environment, culture, and specific operational needs.

1. **Skill Specification and Development:** Organizations recognize the importance of specifying and developing the exact skills required for employees to perform their roles effectively. This driver focuses on tailoring training programs to meet precise job requirements.
2. **Organizational Culture:** A culture that values continuous learning and development encourages employees to engage in training programs. This culture promotes an environment where skill enhancement is a constant priority.
3. **Leadership and Management Initiatives:** Leaders and managers play a crucial role in advocating for training programs. Their commitment to employee development can significantly influence the organization's training priorities.
4. **Internal Process Improvement:** The need to improve internal processes and enhance efficiency can drive the demand for training. Organizations aim to streamline operations by equipping employees with the necessary skills.

External Drivers

External drivers are factors outside the organization that influence the need for training. These drivers are often shaped by external market conditions, technological advancements, and industry standards.

1. **Technological Advancements:** Rapid technological changes and the introduction of new tools and systems necessitate ongoing training for employees to stay current and proficient.
2. **Market and Industry Trends:** Keeping up with industry trends and market demands can drive the need for specialized training programs. Organizations must adapt to changes in the market to remain competitive.
3. **Regulatory and Compliance Requirements:** Changes in regulations and compliance standards often necessitate training to ensure that employees are aware of and adhere to new legal requirements.
4. **Customer Expectations:** Evolving customer expectations and preferences can drive the need for training to improve service quality and meet client demands effectively.

- 5. Competitive Pressure:** Competitive pressure from other organizations can motivate the need for training to enhance employee skills and maintain a competitive edge in the industry.

6. Integration of literature review results and interviews on training silver workers

The previous whitepaper produced by EXPERTISE consortium is based on extensive literature review focused on silver workers and their position in the labour market. The aim of this section is to interconnect results from this literature review with results from interviews, in order to determine similarities in findings, as well as identify areas where interviews provide added value. This comprehensive analysis reveals both theoretical and practical perspectives on the training needs and preferences of older employees, offering a nuanced understanding of how organizations can better support this demographic.

Recognition of Training Needs

The literature review emphasizes the significant gap in training programs tailored specifically for silver workers. Most existing programs are predominantly focused on younger employees, leaving older workers underserved. The literature highlights the necessity for continuous, age-appropriate training, particularly in areas such as Information and Communication Technology (ICT) and Industry 4.0 skills. This theoretical understanding aligns closely with the insights gained from the interviews.

From the interviews, it is clear that silver workers and HR managers both acknowledge the inadequacy of current training programs. Many silver workers reported that their training needs are not fully addressed by existing programs. Instead of undergoing formal training, they often rely on consulting with experts or superiors. There is a significant call for more structured training materials and procedures, such as detailed brochures and documented workflows. Key skills identified as lacking include proficiency in technology. This practical feedback from silver workers provides a concrete foundation for the theoretical claims made in the literature.

Importance of Interactive and Personalized Learning

The literature underscores the effectiveness of interactive and personalized learning experiences. It suggests the use of mentors and a supportive organizational culture to

enhance learning outcomes. This approach is validated by the interview findings, where silver workers expressed a strong preference for hands-on and visual learning methods over traditional manuals. They emphasized the need for personalized training that considers their individual learning paces and prior experiences.

HR managers also highlighted the benefits of interactive learning. They noted that face-to-face training sessions are generally preferred for complex topics, as these allow for direct interaction and immediate feedback. This preference for interactive learning aligns with the literature's recommendations and underscores the importance of designing training programs that are engaging and tailored to the needs of older employees.

Challenges Related to Technological Adaptation

Both the literature and interview results highlight the challenges silver workers face in adapting to new technologies. The literature discusses the rapid pace of technological advancement as a major obstacle, emphasizing the need for ongoing ICT training tailored to older employees. The interviews provide practical insights into these challenges, with silver workers mentioning difficulties in adapting to new technologies due to the lack of formalized, targeted training programs.

Silver workers suggested that practical, hands-on training methods are more effective than traditional classroom settings for technology adoption. They highlighted the importance of seeing the practical benefits of new technologies in making their work easier. This feedback enriches the literature's theoretical perspective by providing concrete examples of effective training methods.

Role of Organizational Culture

A supportive organizational culture is crucial in promoting continuous learning and development, as highlighted in the literature. This includes creating an environment that values and integrates the contributions of older workers. The interviews with HR managers revealed that while there is an acknowledgment of the need to support silver workers, current practices often fall short.

HR managers pointed out that training and onboarding procedures do not specifically cater to older employees. Instead, training is generally based on experience and team fit rather than age. However, there is recognition of the need to integrate soft skills training, such as communication and conflict resolution, to support the long-term

inclusion of silver workers. This practical insight provides a detailed understanding of how organizational culture can influence training effectiveness, complementing the broader themes discussed in the literature.

Detailed Insights into Individual Preferences and Experiences

The interviews offer a nuanced understanding of silver workers' preferences for training methods, providing detailed insights that extend beyond the general recommendations found in the literature. For example, many respondents highlighted the effectiveness of practical, context-specific training over generic programs. They expressed a preference for training sessions that are directly applicable to their daily tasks and responsibilities.

HR managers also provided specific examples of organizational practices and challenges, such as the decentralization of training needs assessment and the practical difficulties of implementing structured training programs. These insights offer concrete examples that complement the theoretical frameworks discussed in the literature, providing a more grounded understanding of the challenges and opportunities in training silver workers.

Identification of Key Skills Lacking among Silver Workers

The interviews identified particular skills gaps, such as proficiency in Excel and internet use, that are not explicitly detailed in the literature. This specific feedback can guide the development of targeted training programs. For instance, silver workers noted that while basic training on these tools is often available, more advanced and practical training is needed to fully leverage these technologies in their roles.

HR managers also highlighted the importance of integrating continuous feedback mechanisms into training programs to ensure they remain relevant and effective. This practical advice aligns with the literature's emphasis on the need for ongoing evaluation and adaptation of training programs.

Real-World Challenges and Solutions

The interview results highlight real-world challenges, such as time constraints and the balancing of training with regular work schedules. Silver workers and HR managers suggested practical solutions, such as integrating shorter, more frequent training sessions into the regular workflow. This practical advice adds value to the theoretical

recommendations from the literature, providing actionable insights that organizations can implement to improve training effectiveness.

Impact of Mentorship and Knowledge Transfer Programs

The interviews provide detailed accounts of the effectiveness of mentorship and knowledge transfer programs. Silver workers and HR managers both emphasized the value of structured programs where younger employees share technological insights with older colleagues. These first-hand experiences validate the literature's emphasis on cross-generational learning and offer actionable insights into how such programs can be implemented effectively.

HR managers also noted the importance of creating opportunities for older employees to mentor younger colleagues, leveraging their extensive experience and knowledge. This reciprocal learning approach fosters mutual respect and comprehensive skill development, aligning with the broader themes discussed in the literature.

Feedback on Training Effectiveness

Silver workers' feedback on the effectiveness of different training formats provides valuable data that can be used to refine training delivery methods. For instance, many respondents expressed a preference for in-person sessions over online ones for complex topics. This detailed feedback enhances the broader strategies suggested in the literature, providing a more comprehensive understanding of how to design effective training programs for silver workers.

The integration of literature review insights and detailed interview findings provides a comprehensive understanding of the training needs and preferences of silver workers. While the literature offers a robust theoretical foundation, the interviews provide valuable practical insights and specific examples that ground these theories in real-world experiences. By combining these perspectives, organizations can develop more effective, targeted, and practical training programs that address the unique needs of their aging workforce. This holistic approach ensures that silver workers remain engaged, productive, and valuable contributors to their organizations.

7. Conclusion and further steps

This white paper has explored the multifaceted requirements and needs for training silver workers in Purchasing and Supply Management (PSM) roles, integrating insights

from both comprehensive literature reviews and in-depth interviews with silver workers and HR managers. The findings highlight several critical areas where organizations can enhance their training programs to better support and engage their aging workforce.

The results indicate that existing training programs often fall short in addressing the specific needs of silver workers. Both silver workers and HR managers acknowledge the inadequacy of current training approaches, which tend to overlook the unique challenges faced by older employees. There is a clear demand for more structured, targeted training materials and procedures that consider the varying learning paces, technology proficiency, and practical application preferences of silver workers.

Our analysis has identified three main areas of interest: Training Methods and Characteristics, Organisational Culture, and Individual Characteristics of Silver Workers. In the area of Training Methods and Characteristics, several distinct categories were identified, emphasizing the need for a balanced approach that includes both online and in-person sessions, personalized training, and practical, hands-on learning methods. Organizational Culture insights reveal the importance of creating a supportive environment that values continuous learning and knowledge transfer. Finally, the area covering Individual Characteristics of Silver worker, underscores the importance of recognizing and leveraging the unique strengths and challenges of silver workers.

The integration of literature review findings with empirical data from interviews provides a comprehensive framework for developing effective training programs. Practical examples from the interviews offer actionable insights that complement the theoretical recommendations, ensuring that training programs are not only relevant but also feasible and impactful.

Organizations that aim to maintain a competitive edge and foster a dynamic, inclusive workforce must prioritize the development and implementation of training programs tailored to the needs of silver workers. By addressing the specific challenges and leveraging the strengths of older employees, companies can enhance productivity, innovation, and overall employee satisfaction.

The insights gained from this white paper underscore the necessity of a strategic and empathetic approach to training silver workers. As the workforce continues to age, it is

imperative for organizations to adapt their training methodologies to support the lifelong learning and professional growth of their employees. By doing so, they not only ensure the continued relevance and competency of their workforce but also demonstrate a commitment to valuing and investing in the diverse experiences and skills that silver workers bring to the table.

As consortium move forward in EXPERTISE project, the insights gained from the extensive literature review and expert interviews will serve as foundational elements for the subsequent work packages (WPs). These results have provided a comprehensive understanding of the training needs and preferences of silver workers in Purchasing and Supply Management (PSM) roles.

In the next phase of project have already formulated specific survey questions based on these findings. These questions are designed to verify the results from our initial research and to measure the importance of the proposed concepts. By reaching out to a broader audience, we aim to gather quantitative data that will validate and enrich our qualitative insights.

Furthermore, the identified requirements and needs will be integral in the development of the curriculum and learning materials. These educational resources will be meticulously crafted to address the unique challenges faced by silver workers, ensuring that the training is not only relevant but also practical and effective. Our goal is to create a robust training framework that supports continuous learning and skill development, tailored specifically to the needs of older employees.